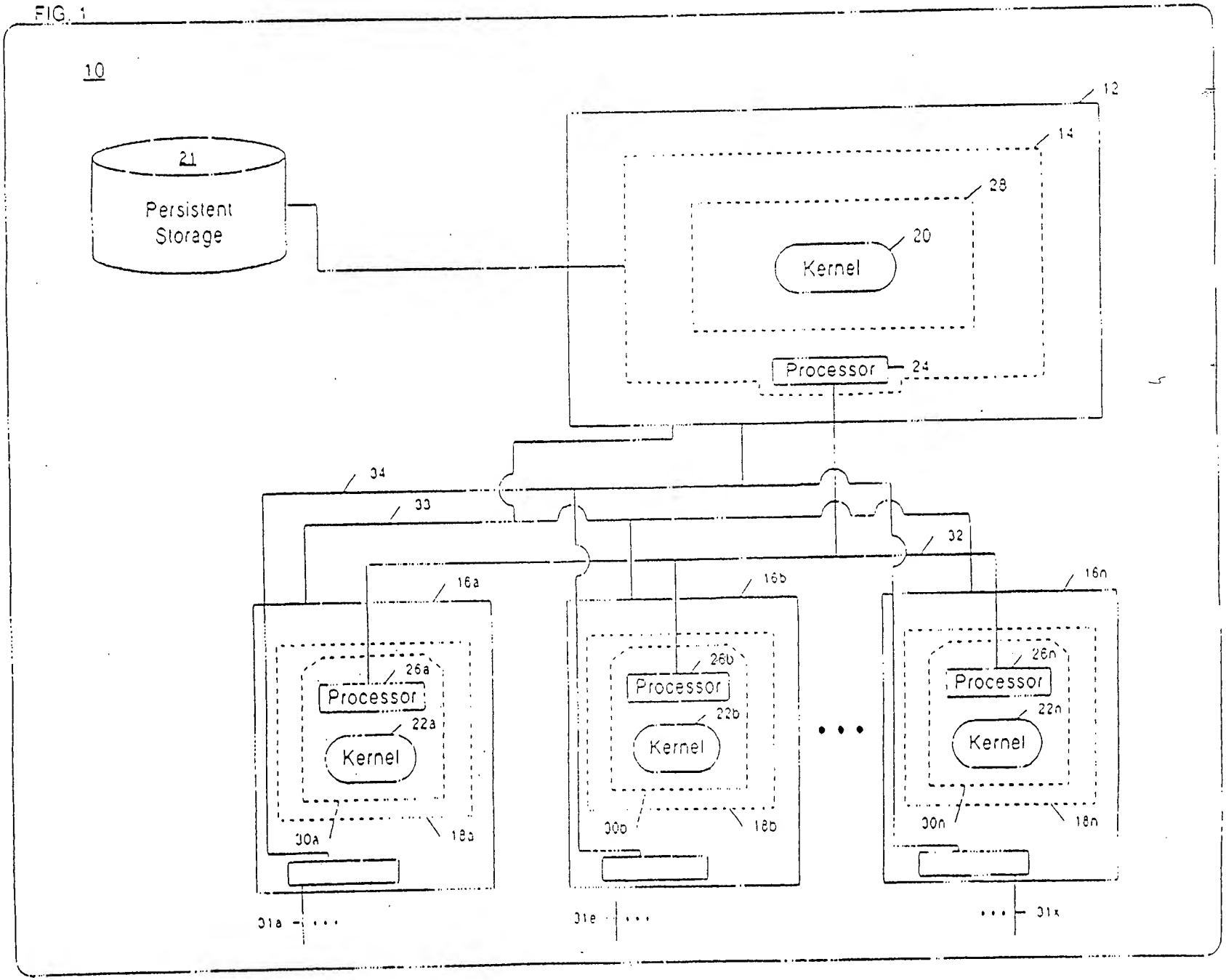
BEST AVAILABLE COPY

FIG. 1



00E880 2142536D

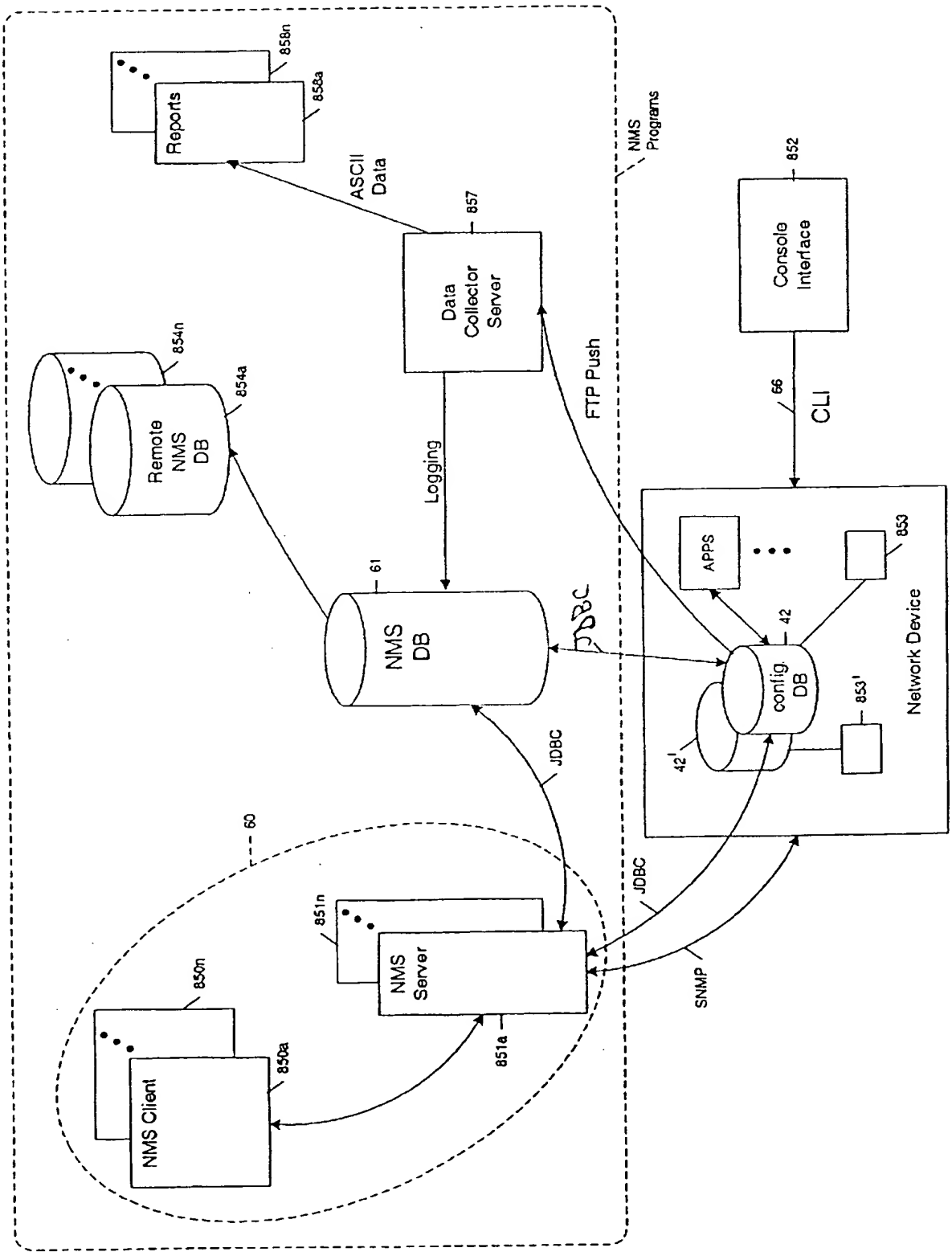


Fig. 2a

DOCKET ALARM

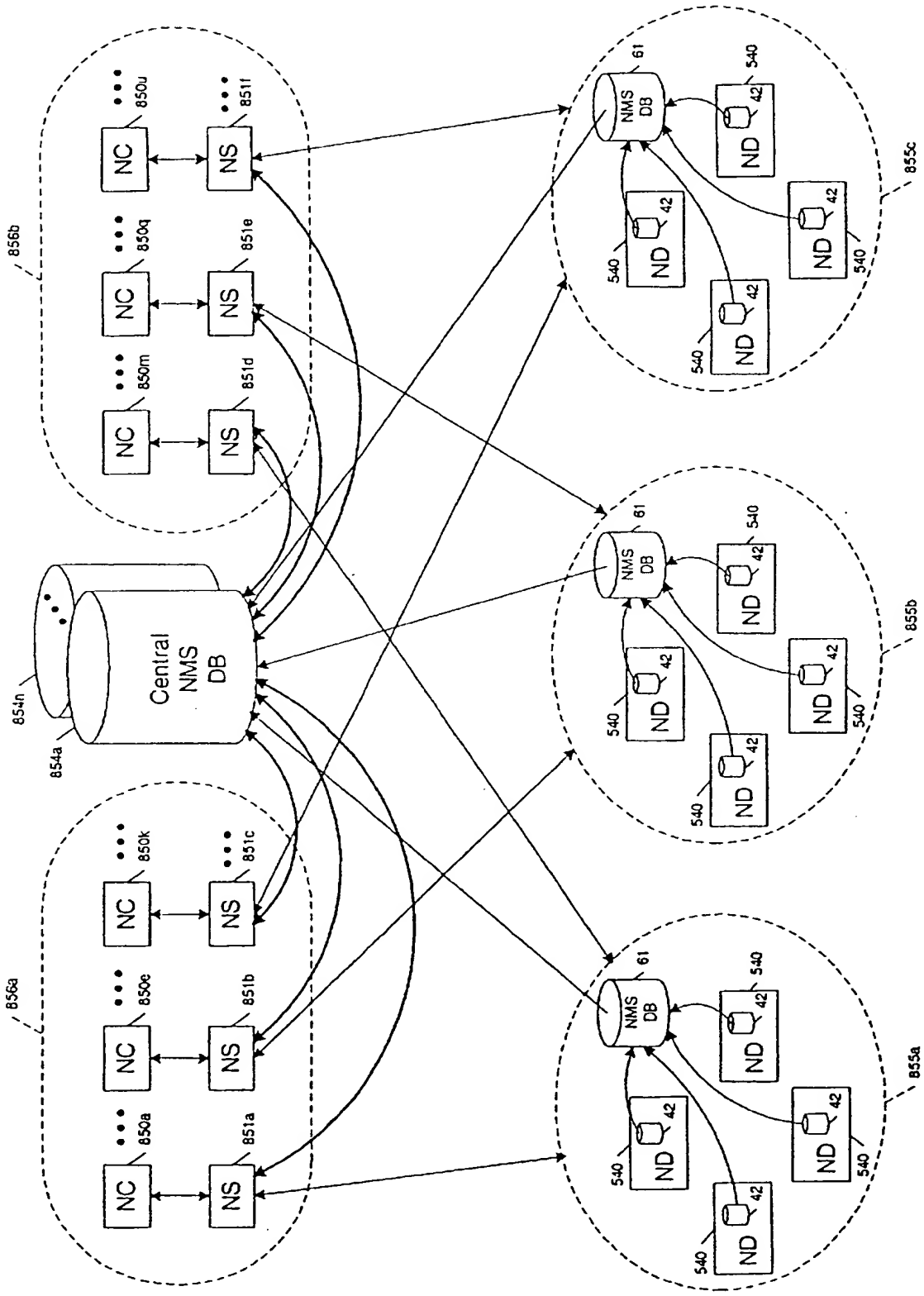


Fig. 2b

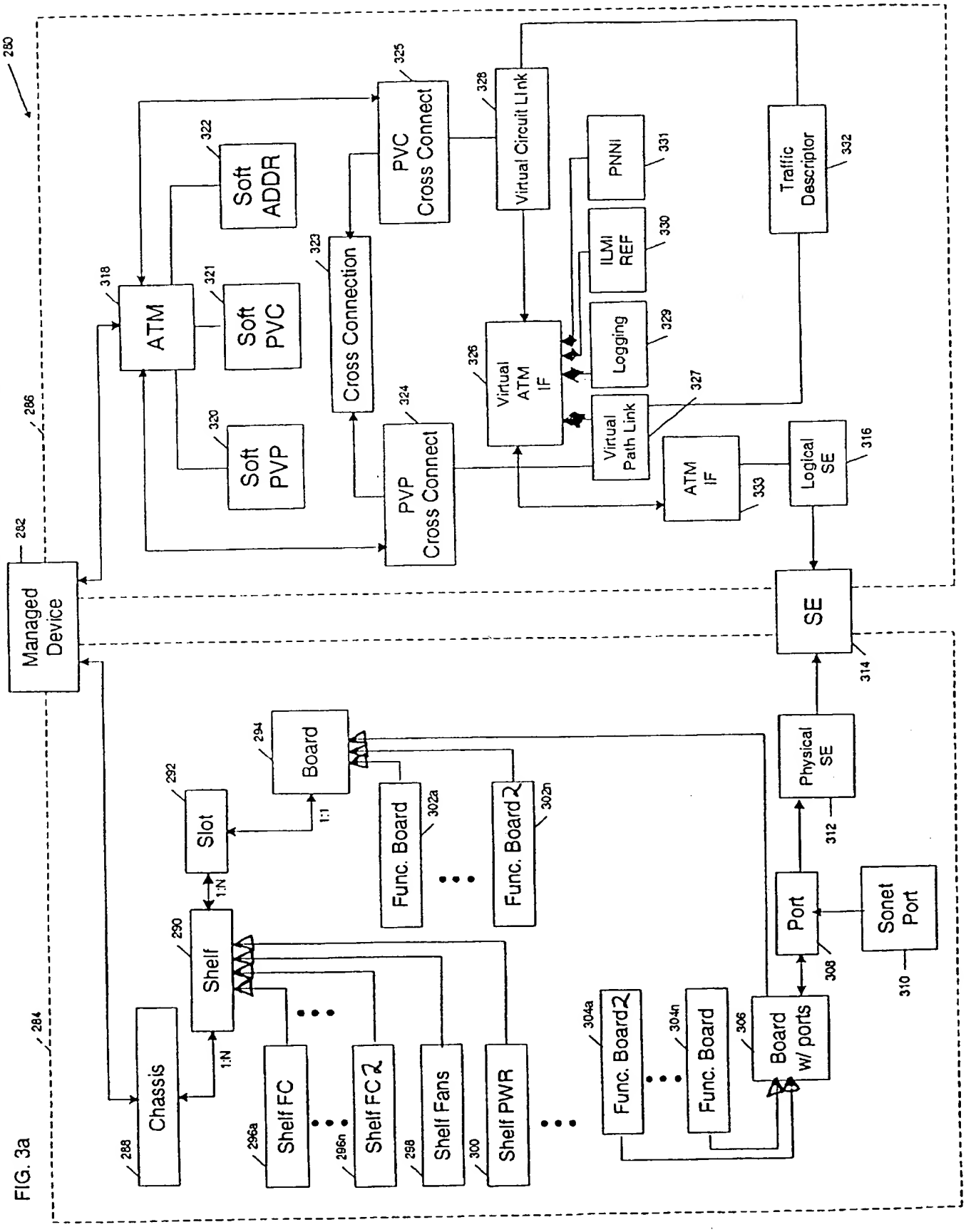

280
Managed Device
282
286
ATM
318
Soft PVC
321
Soft ADDR
322
Soft PVP
320
PVC Cross Connect
325
PVP Cross Connect
324
Cross Connection
323
Virtual Circuit Link
328
Virtual ATM IF
326
Virtual Path Link
327
PNNI
331
ILMI REF
330
Logging
329
Traffic Descriptor
332
ATM IF
333
Logical SE
316
SE
314
Physical SE
312
Port
308
Sonet Port
310
Board w/ ports
306
Board
294
Slot
292
1:1
1:N
Shelf
290
Chassis
288
Func. Board
302a
Func. Board2
302n
Shelf FC
296a
Shelf FC2
296n
Shelf Fans
298
Shelf PWR
300
Func. Board2
304a
Func. Board
304n
284

FIG. 3a

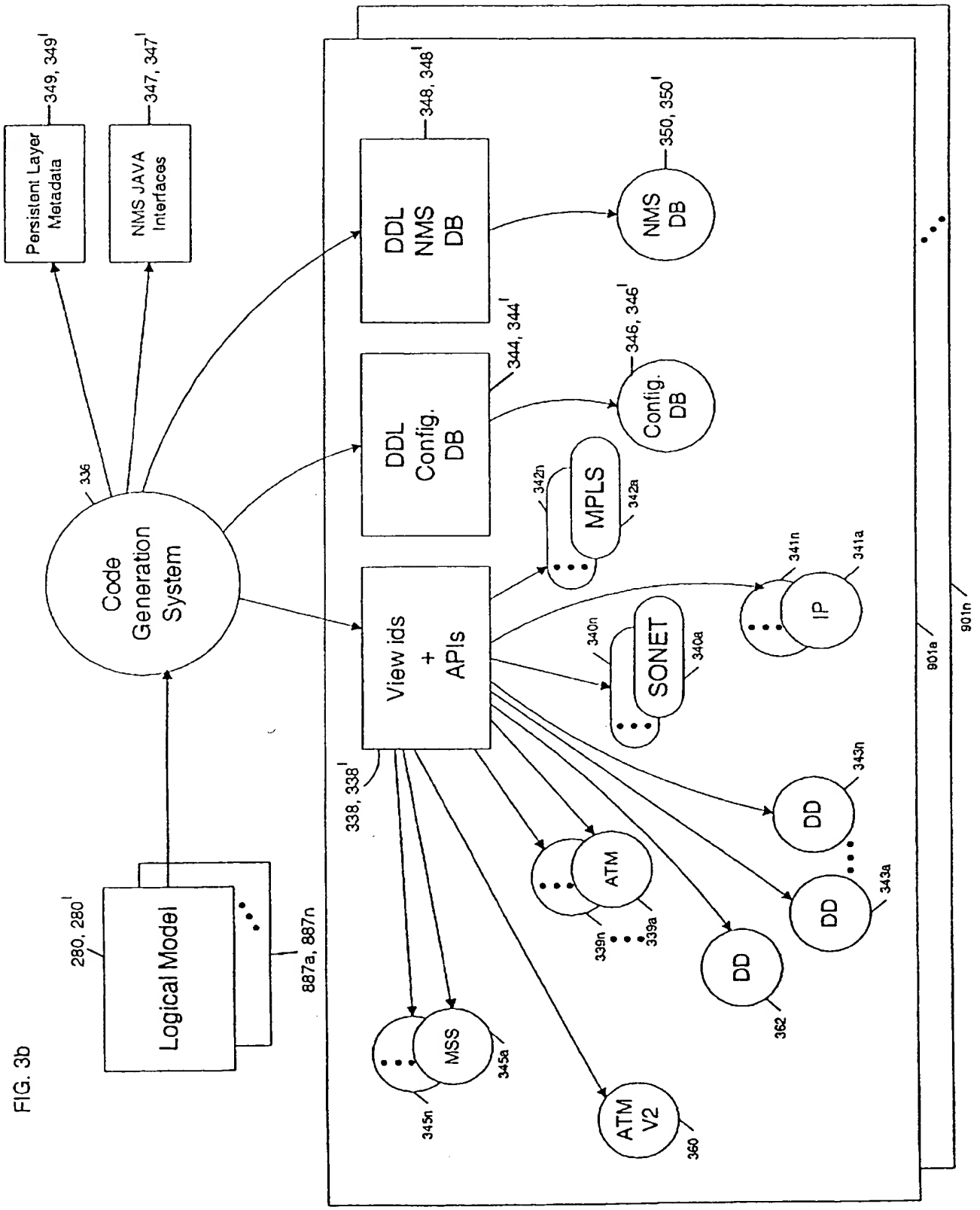

Persistent Layer Metadata
349, 349'
NMS JAVA Interfaces
347, 347'
Code Generation System
336
Logical Model
280, 280'
887a, 887n
DDL NMS DB
348, 348'
DDL Config. DB
344, 344'
View ids + APIs
338, 338'
NMS DB
350, 350'
Config. DB
346, 346'
MPLS
342n
342a
SONET
340n
340a
IP
341n
341a
ATM
339n
339a
DD
343n
DD
343a
DD
362
MSS
345n
345a
ATM V2
360
901a
901n

FIG. 3b

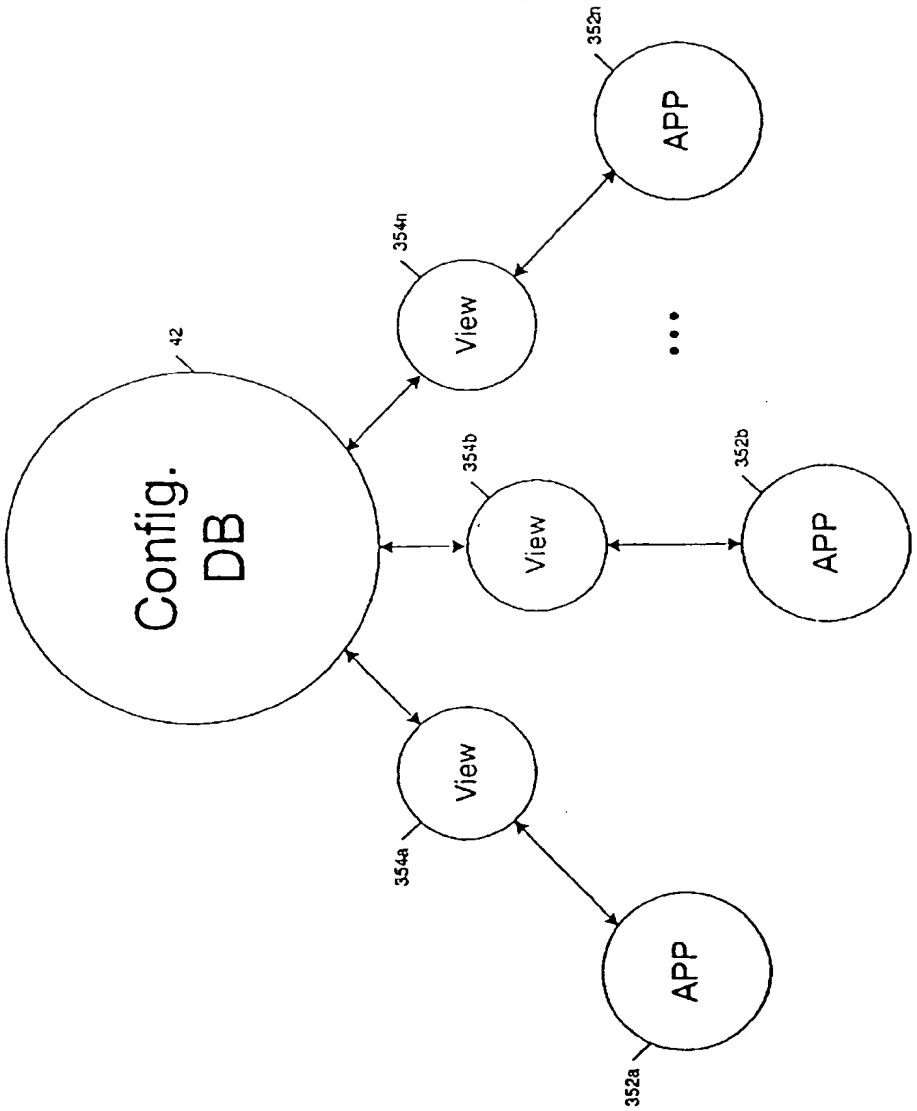
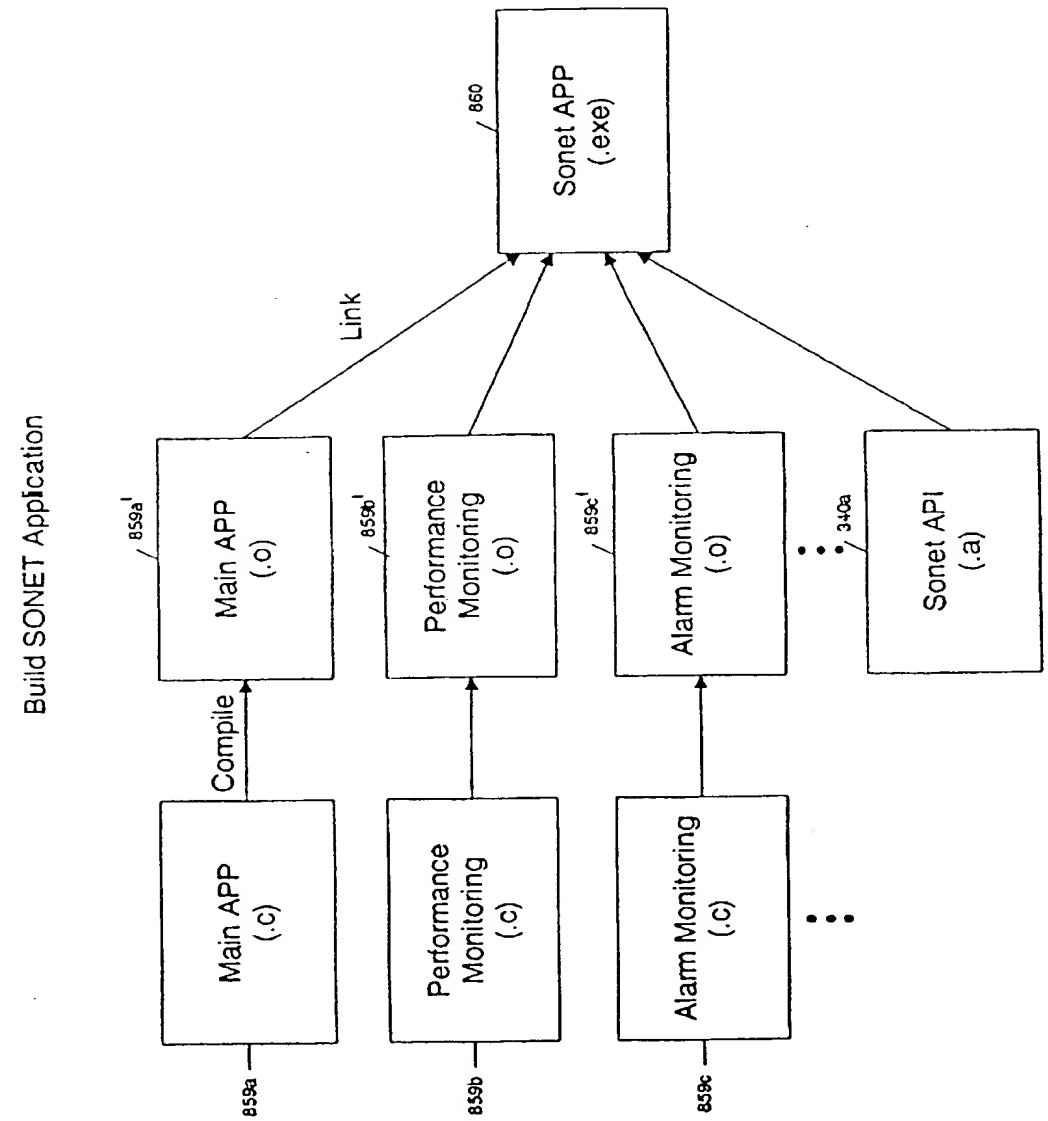

Config. DB
42
View
354a
View
354b
View
354n
APP
352a
APP
352b
APP
352n

FIG. 3c

00TE80" 2TH2S9S0

Fig. 3d



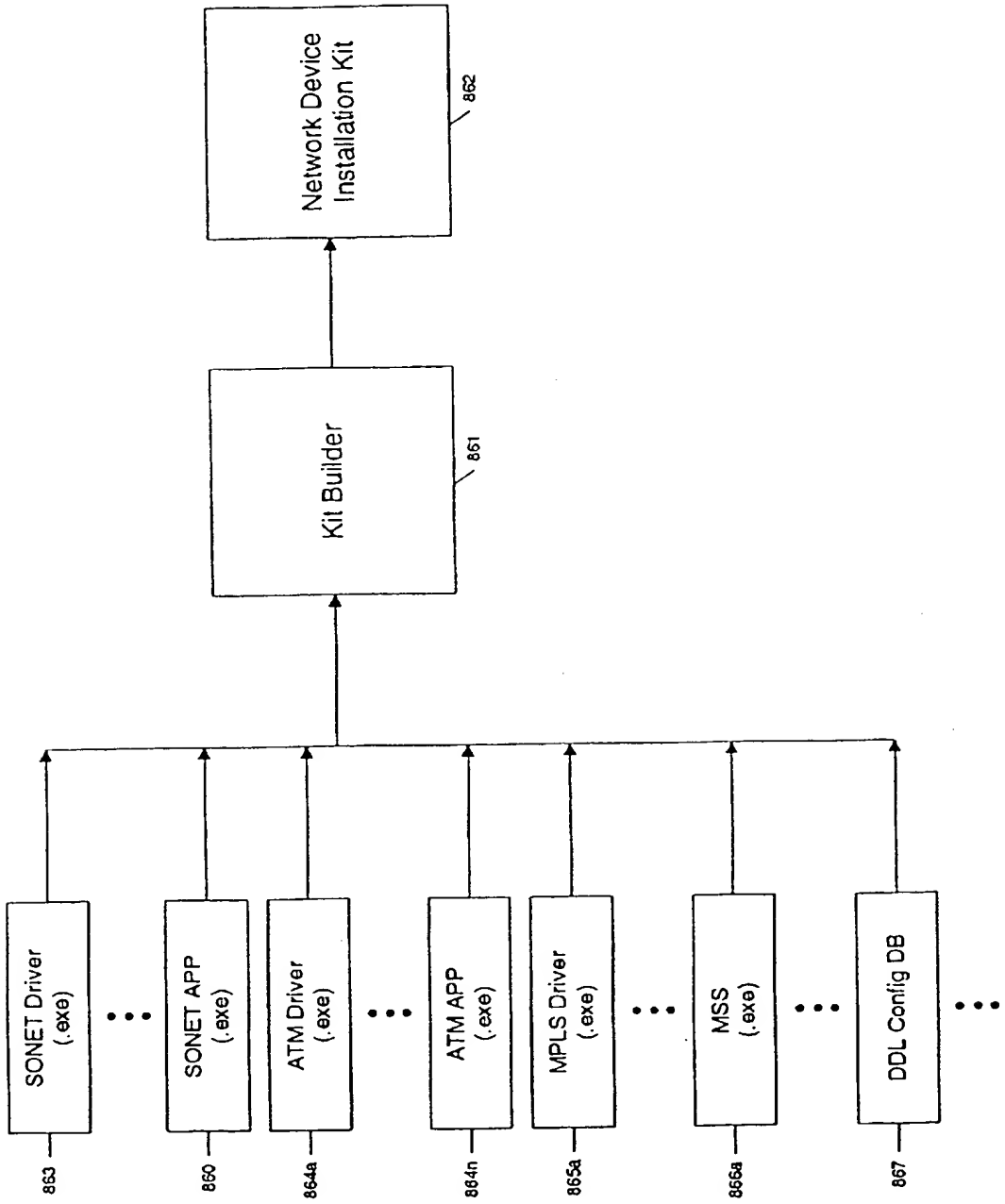

Network Device Installation Kit
862
Kit Builder
861
SONET Driver (.exe)
863
SONET APP (.exe)
860
ATM Driver (.exe)
864a
ATM APP (.exe)
864n
MPLS Driver (.exe)
865a
MSS (.exe)
866a
DDL Config DB
867

Fig. 3e

Sent By: Equipe Communications; 781 795 2031; Jul-21-00 3:34PM; Page 2/2

Fig. 3

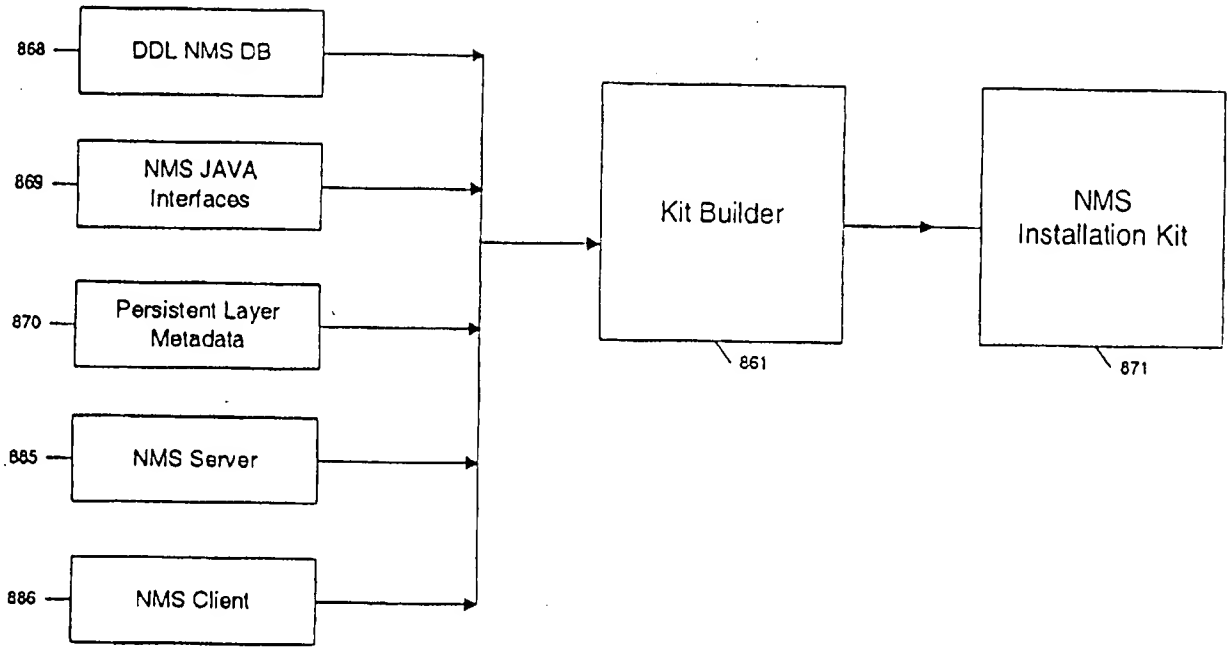
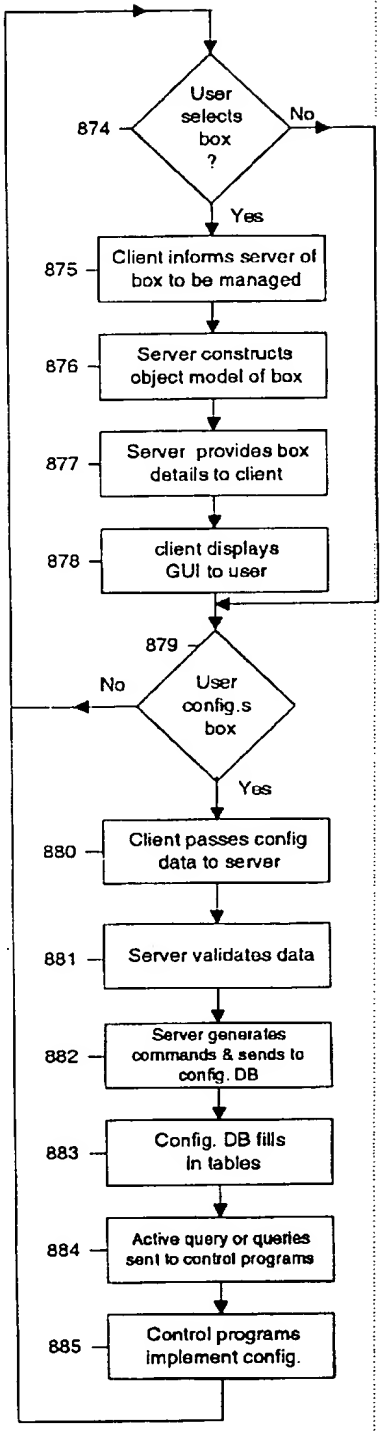


Fig. 3g



DOCKET ALARM

DOCKET ALARM

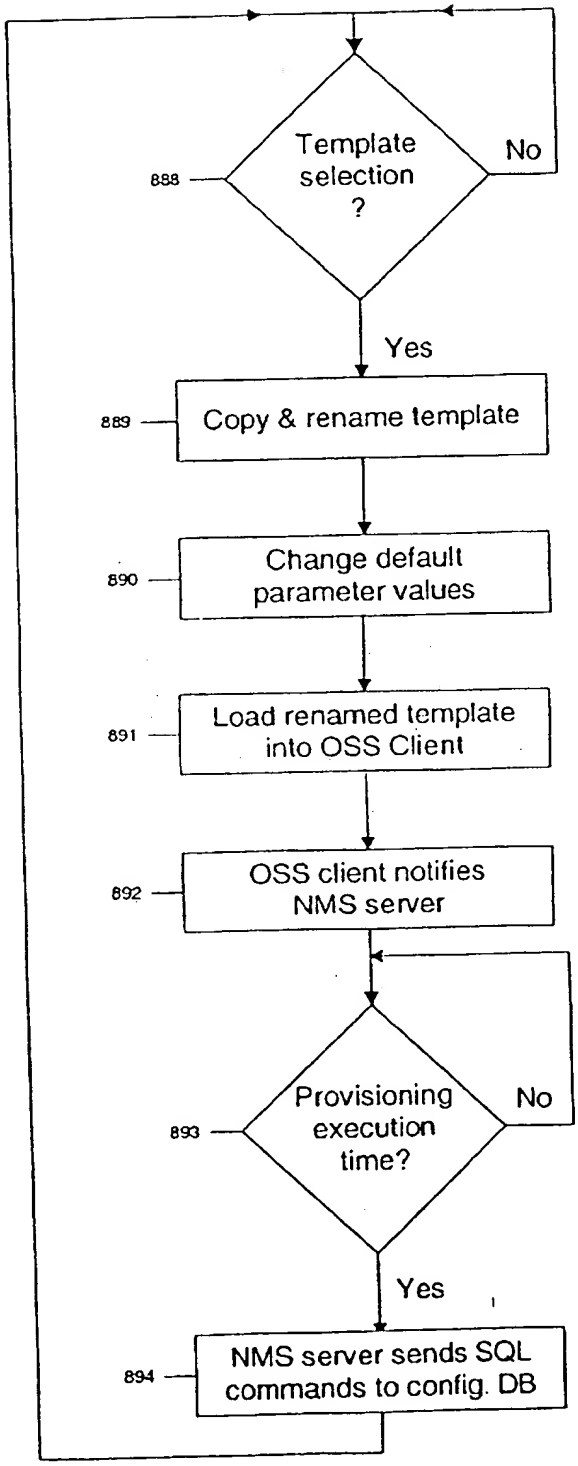


Fig. 3h

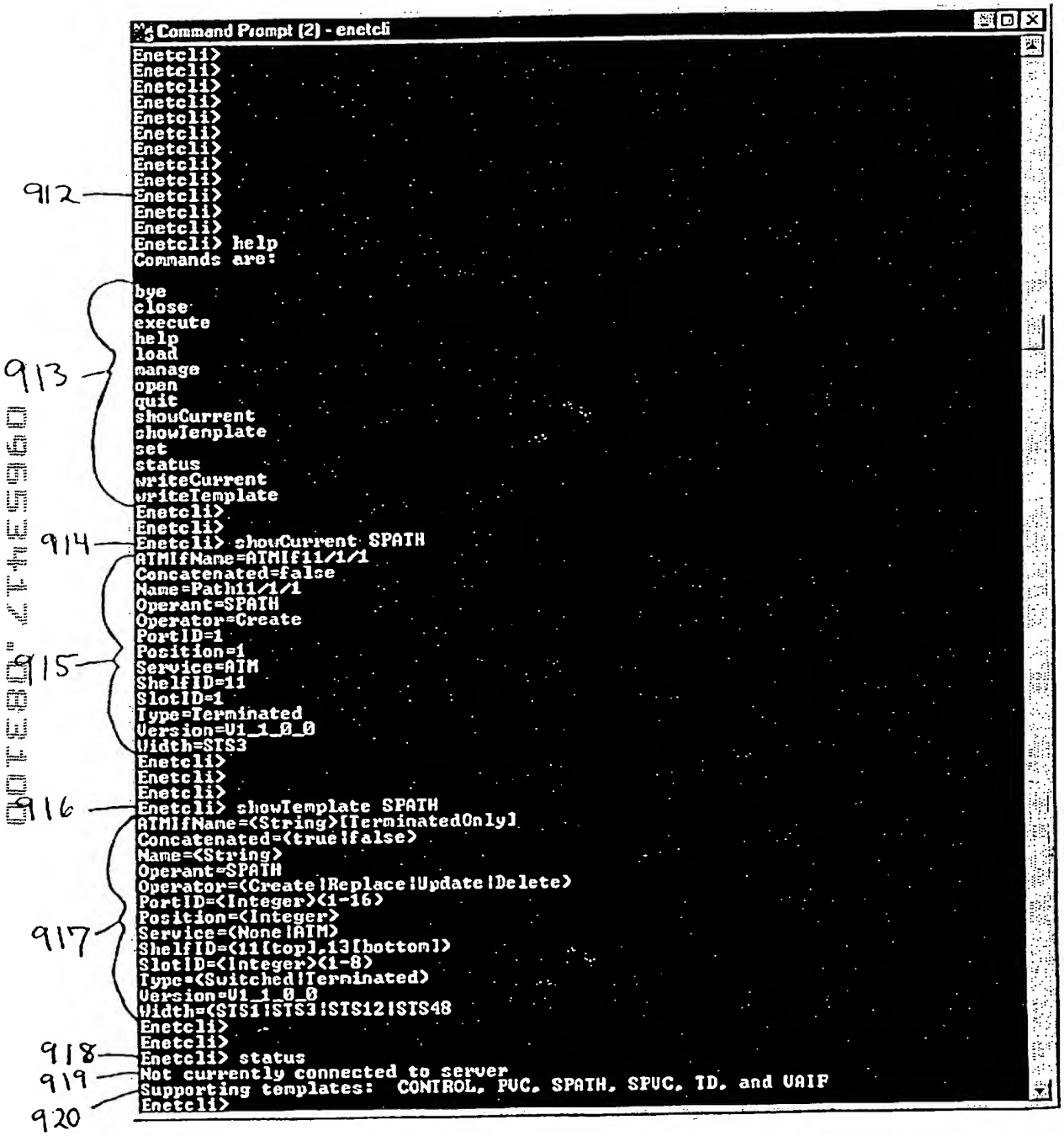

Command Prompt (2) - enetcli
Enetcli>
Enetcli> help
Commands are:
bye
close
execute
help
load
manage
open
quit
showCurrent
showTemplate
set
status
writeCurrent
writeTemplate
Enetcli> showCurrent SPATH
ATMIfName=ATMIf11/1/1
Concatenated=false
Name=Path11/1/1
Operant=SPATH
Operator=Create
PortID=1
Position=1
Service=ATM
ShelfID=11
SlotID=1
Type=Terminated
Version=V1_1_0_0
Width=STS3
Enetcli> showTemplate SPATH
ATMIfName=<String>[TerminatedOnly]
Concatenated=<true|false>
Name=<String>
Operant=SPATH
Operator=<Create|Replace|Update|Delete>
PortID=<Integer>(1-16)
Position=<Integer>
Service=<None|ATM>
ShelfID=<11[top],13[bottom]>
SlotID=<Integer>(1-8)
Type=<Switched|Terminated>
Version=V1_1_0_0
Width=<STS1|STS3|STS12|STS48
Enetcli> status
Not currently connected to server
Supporting templates: CONTROL, PUC, SPATH, SPUC, TD, and VAIF
Enetcli>
912
913
914
915
916
917
918
919
920

Fig. 3i

Fig. 3j

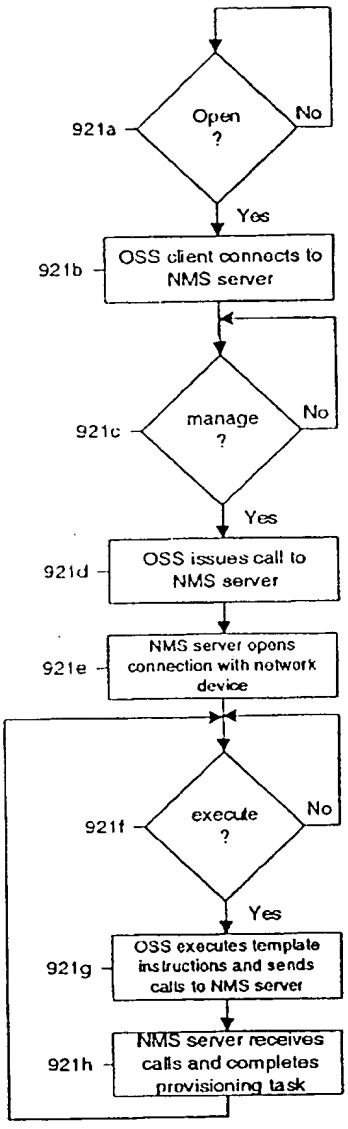

Open ?
No
921a
Yes
OSS client connects to NMS server
921b
manage ?
No
921c
Yes
OSS issues call to NMS server
921d
NMS server opens connection with network device
921e
execute ?
No
921f
Yes
OSS executes template instructions and sends calls to NMS server
921g
NMS server receives calls and completes provisioning task
921h

Fig. 3K

0025F7 0050C2 0080C8

Fig. 3L

924 BATCH

Operant=BATCH
Operator=Execute
Version=V1_1_0_0
924a—Task1=execute-SPATH
924b—Task2=execute-PVC
924c—Task3=execute-SPVC
924d—Task4=load-SPVC-spvc1
924e—Task5=execute-SPVC
924f—Task6=load-SPVC-spvc2
924e—Task7=execute-SPVC
.
.
.
924g—Task50=set-SPATH-PortID-3
924h—Task51=execute-SPATH
924i—Task52=set-SPATH-SlotID-2
924j—Task53=execute-SPATH

DOCKET NO. 50447

Fig. 3M

925

Operant=BATCH
Operator=Execute
Version=V1_1_0_0
925a Task1=execute-CONTROL
925b Task2=execute-SPATH
925c Task3=set-SPATH-PortID-3
925d Task4=execute-SPATH
.
.
.
925e Task61=set-CONTROL-System-192.168.9.201
925f Task62=execute-CONTROL
925g Task63=execute-SPATH
.
.
.
925h Task108=close
925i Task109=set-CONTROL-Server-Server1
925j Task110=set-CONTROL-System-192.168.8.200
925k Task111=execute-CONTROL
925l Task112=execute-SPATH
.
.
.

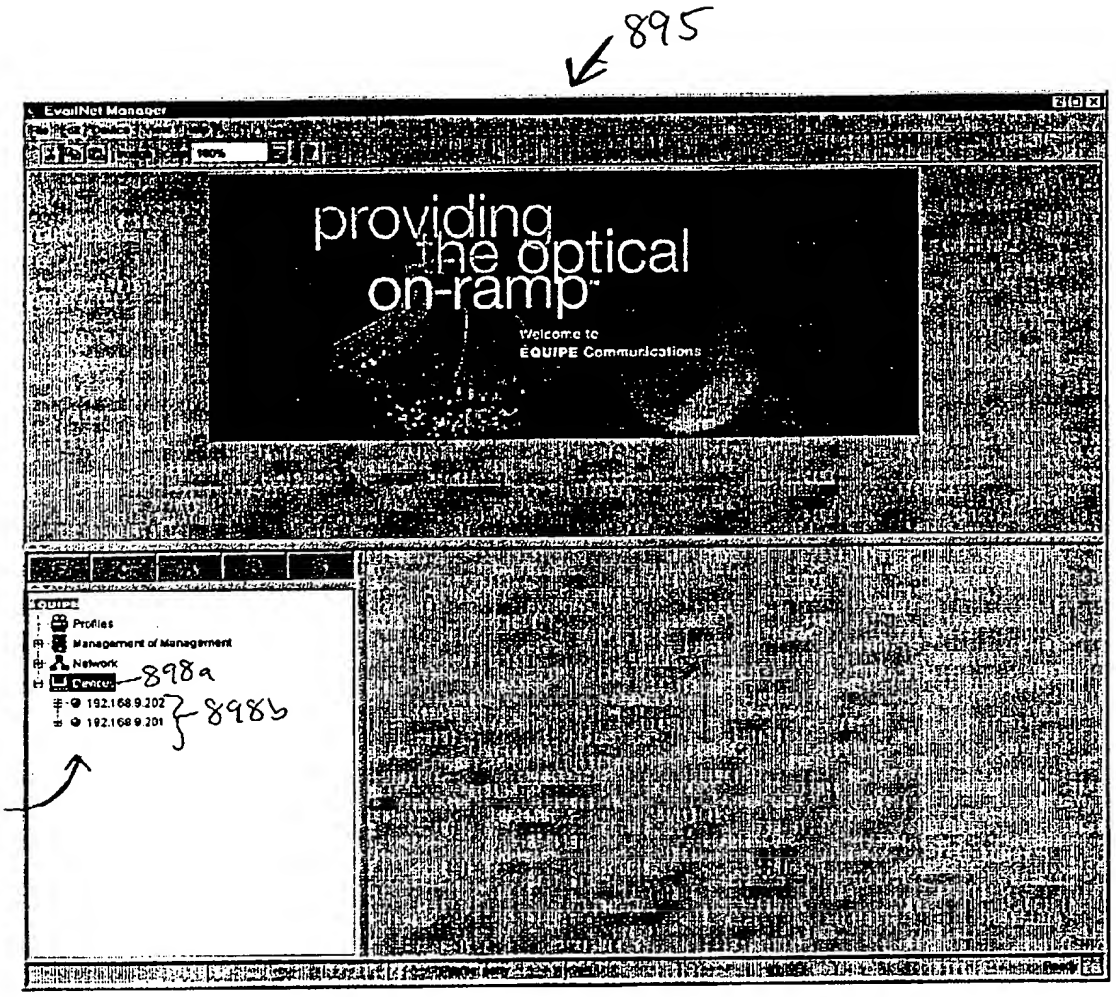


Fig. 4a

DOCKET ALARM

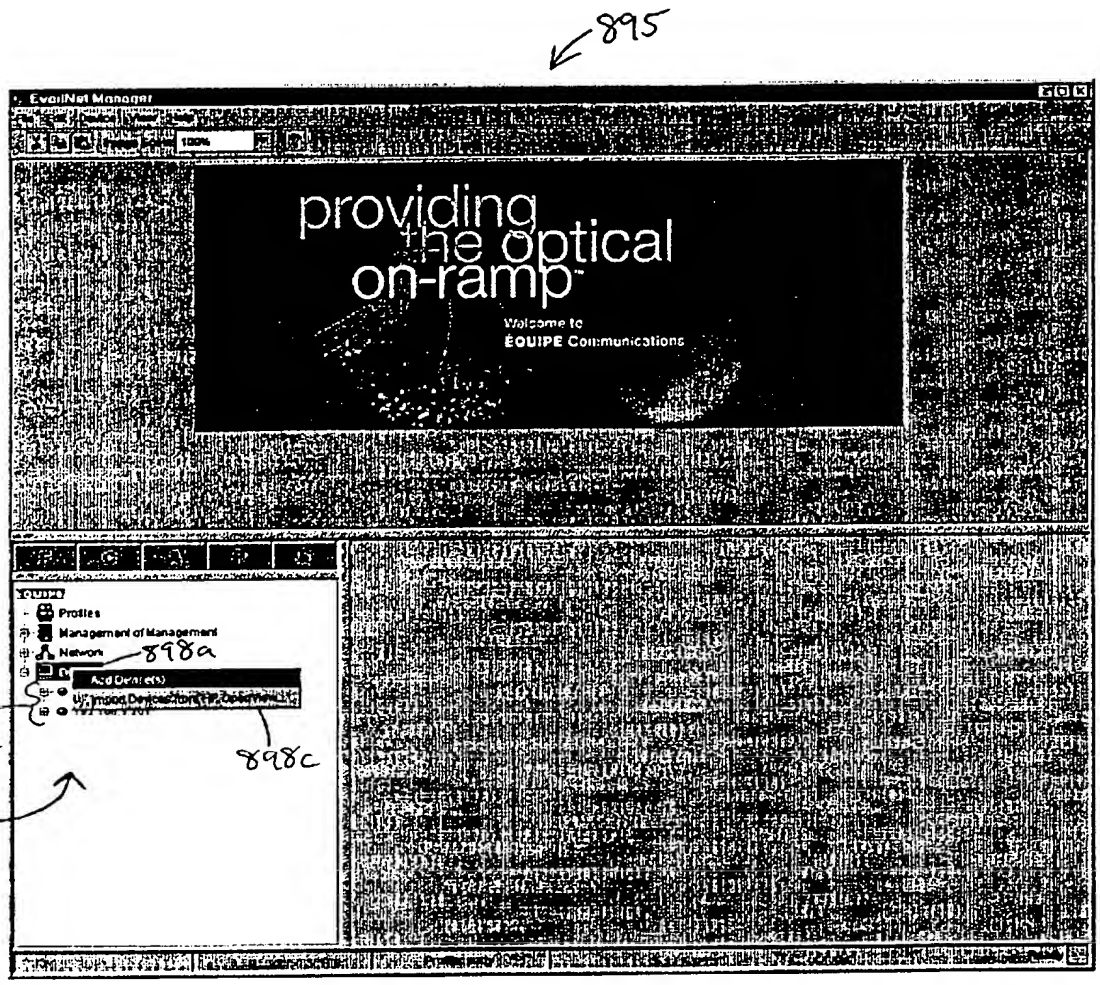


Fig. 4b

DOCKET A L A R M

Fig. 4c

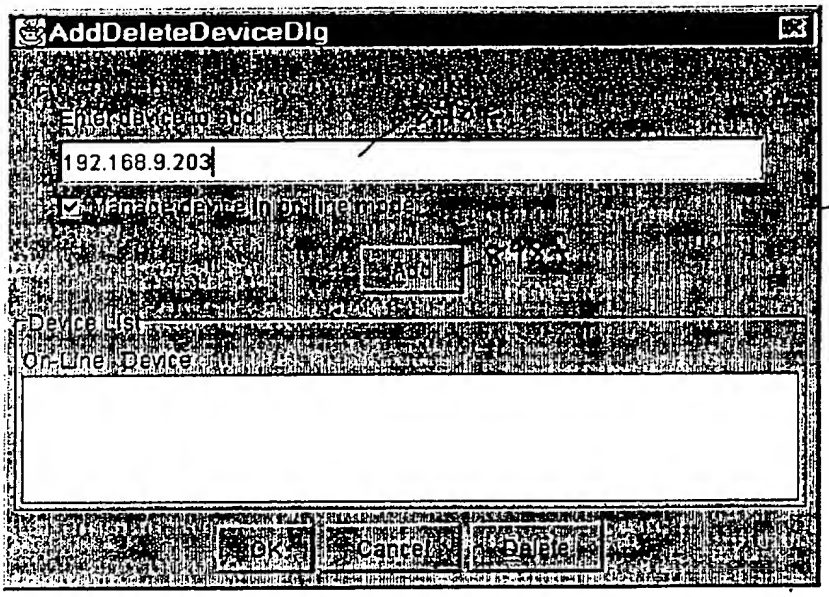
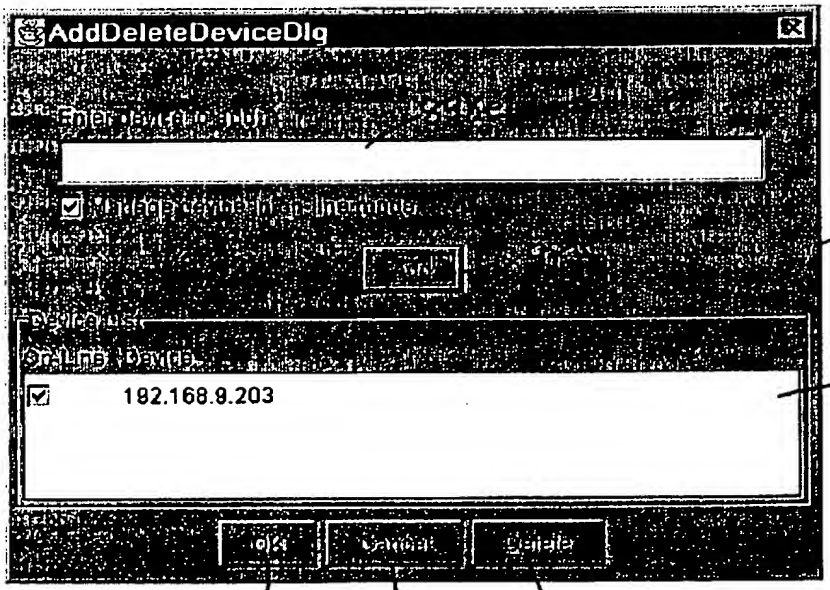


Fig. 4d



0053800-7465950

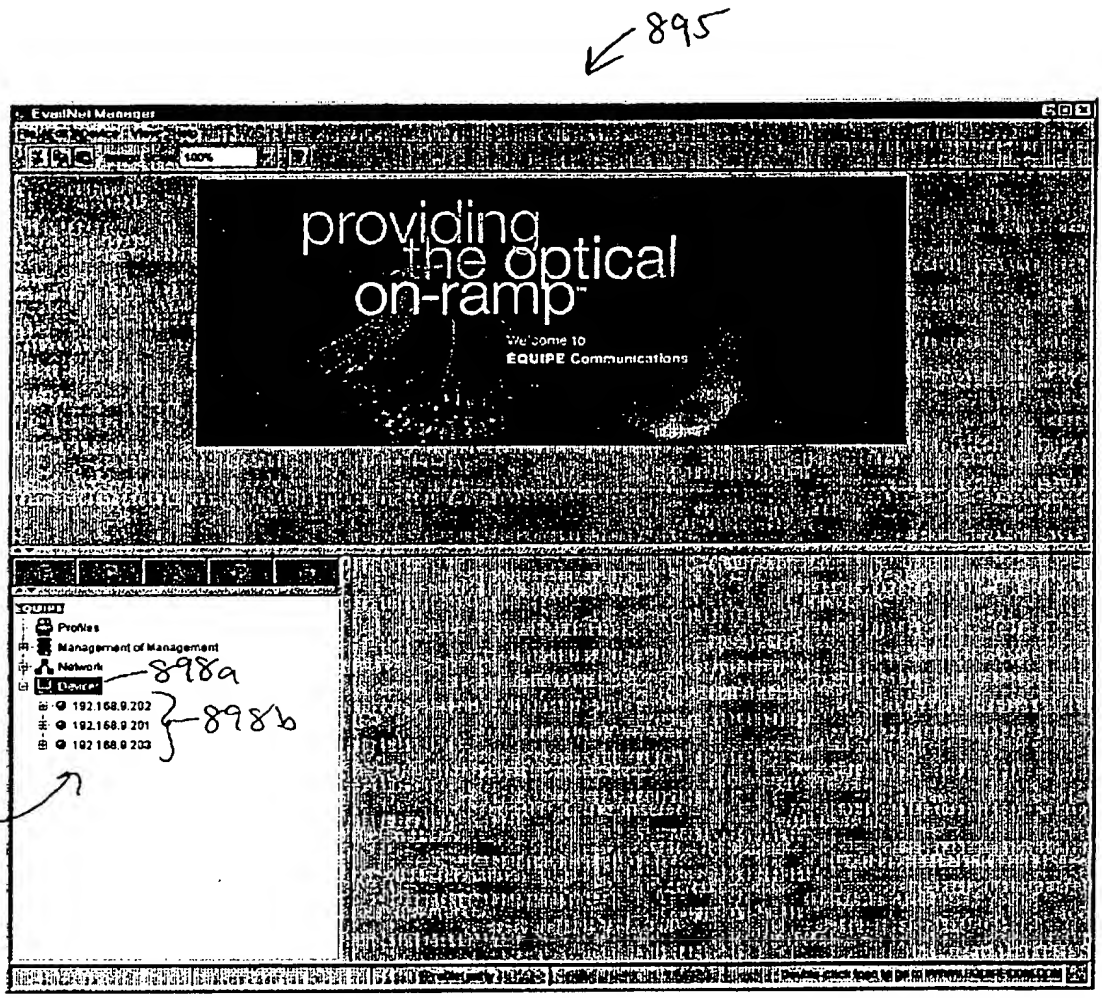


Fig. 4e

DOCKET ALARM

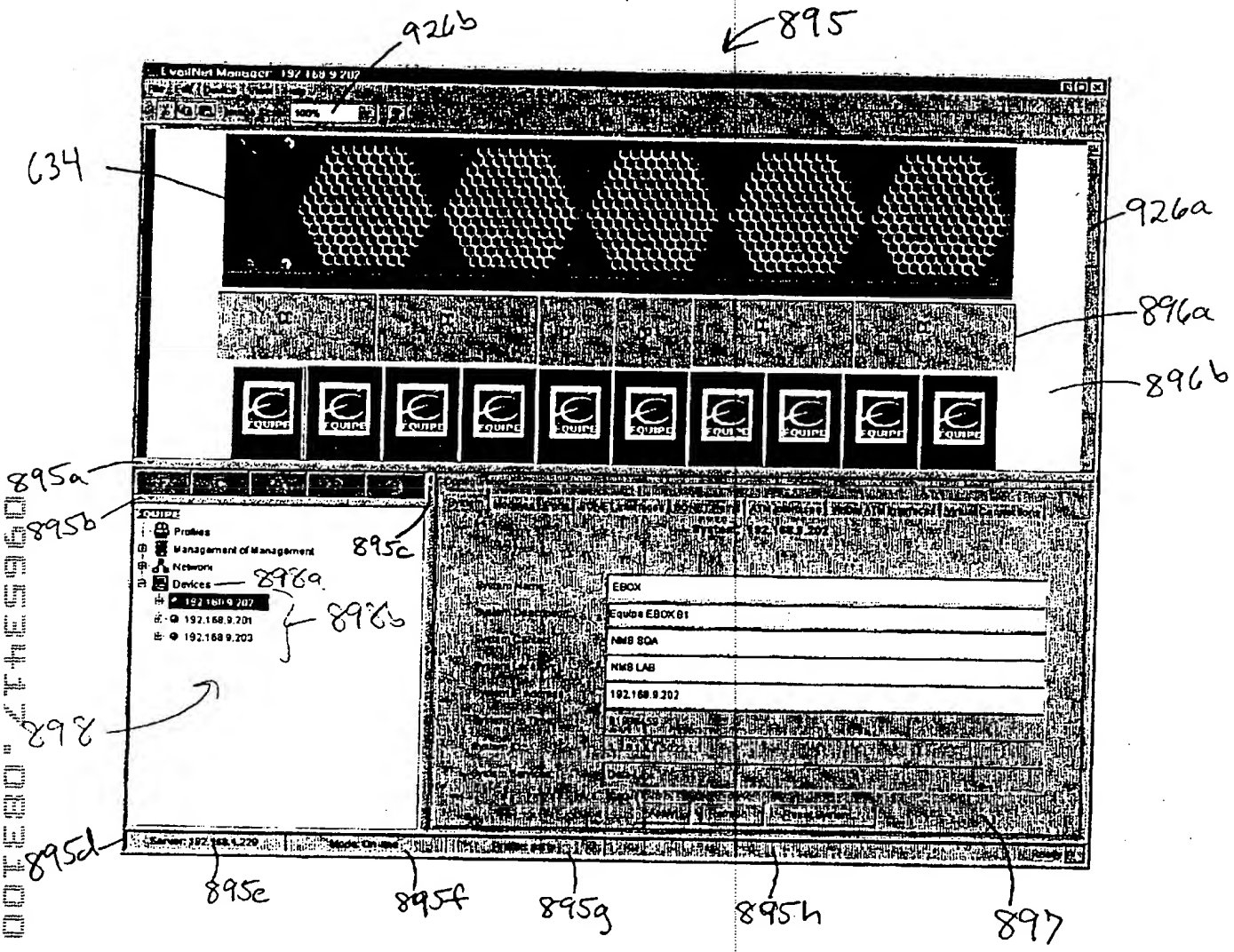

926b
895
634
926a
896a
896b
895a
895b
895c
896a
896b
898
895d
895e
895f
895g
895h
897
Profiles
Management of Management
Network
Devices
192.168.9.201
192.168.9.203
EBOX
Equipe EBOX 01
NMS SOA
NMS LAB
192.168.9.202

Fig. 4f

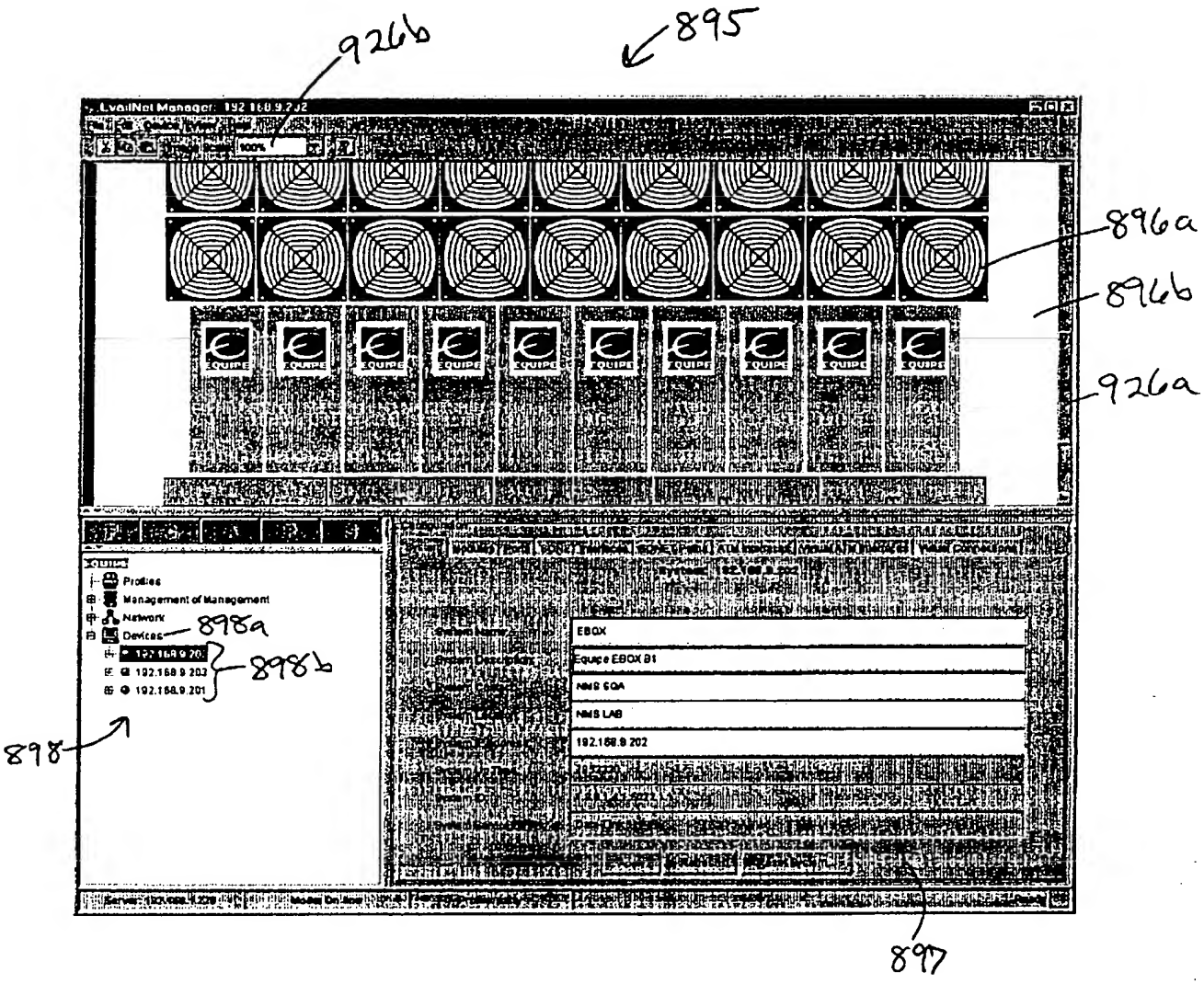

926b
895
896a
896b
926a
898a
898b
898
897
Profiles
Management of Management
Network
Devices
EBOX
Equipe EBOX 01
NMS SQA
NMS LAB
192.168.9.202

Fig. 4g

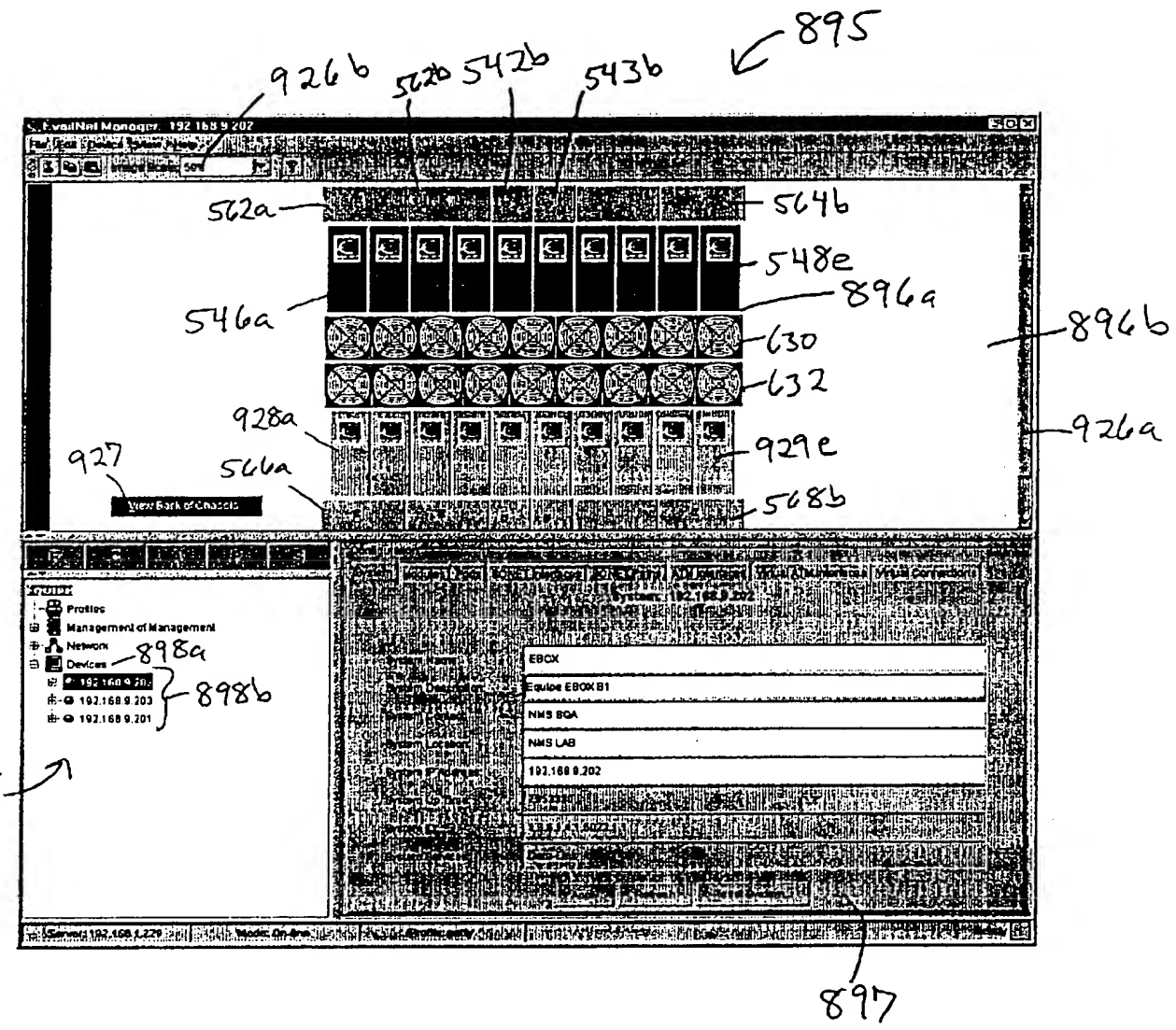


Fig. 4h

DOCKET ALARM

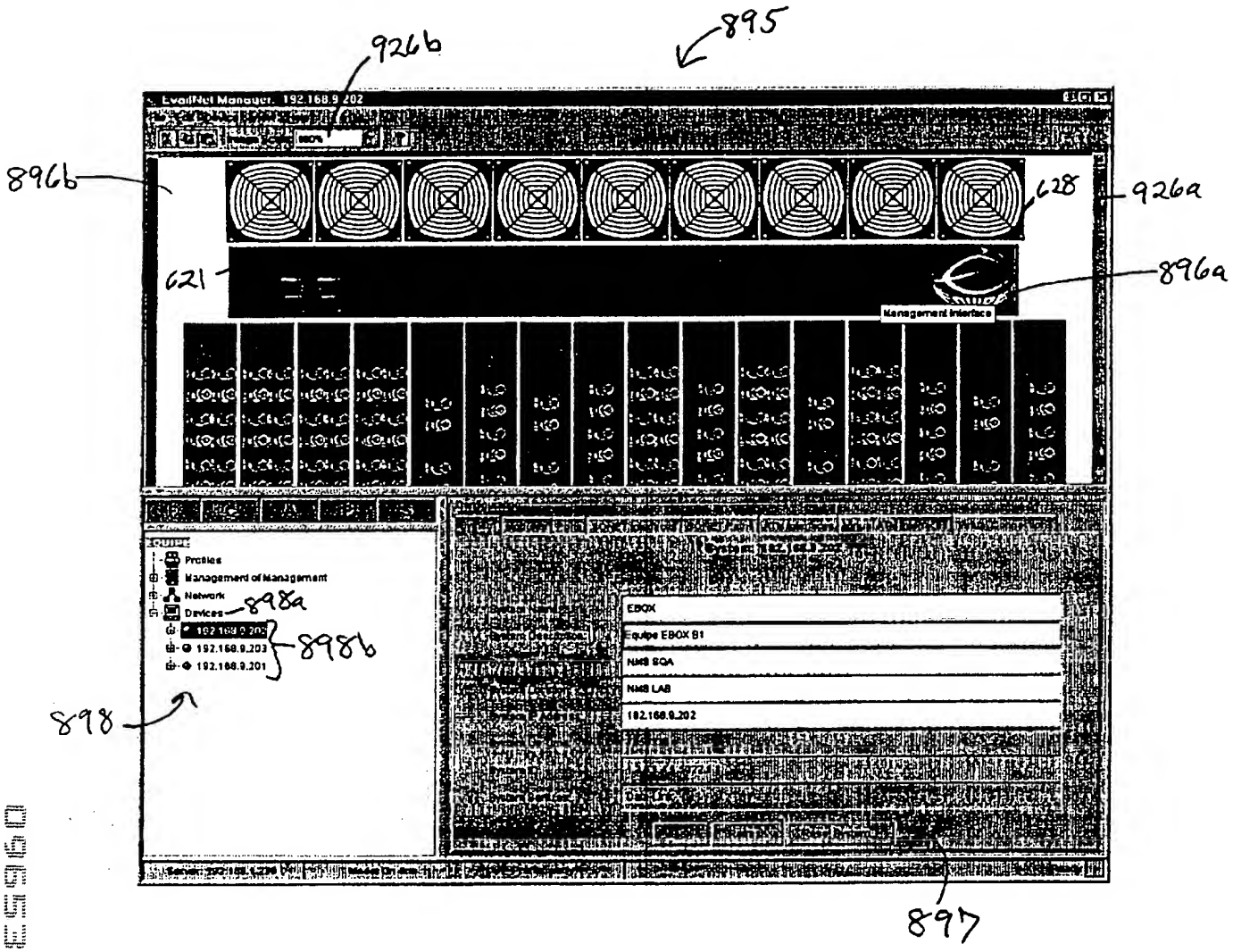


Fig. 4i

DOCSOC-1754550

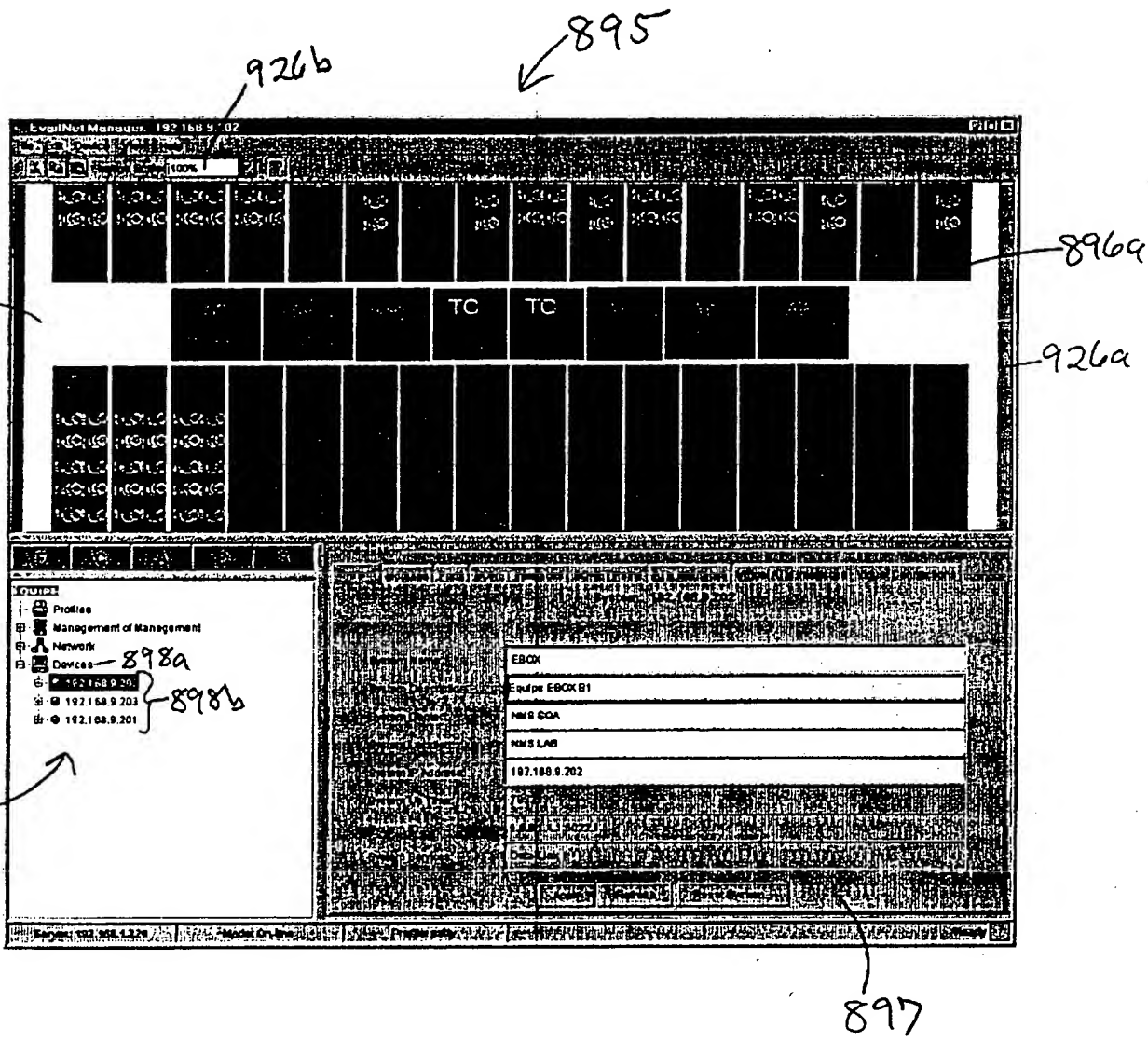


Fig. 4j

DOCKET ALARM

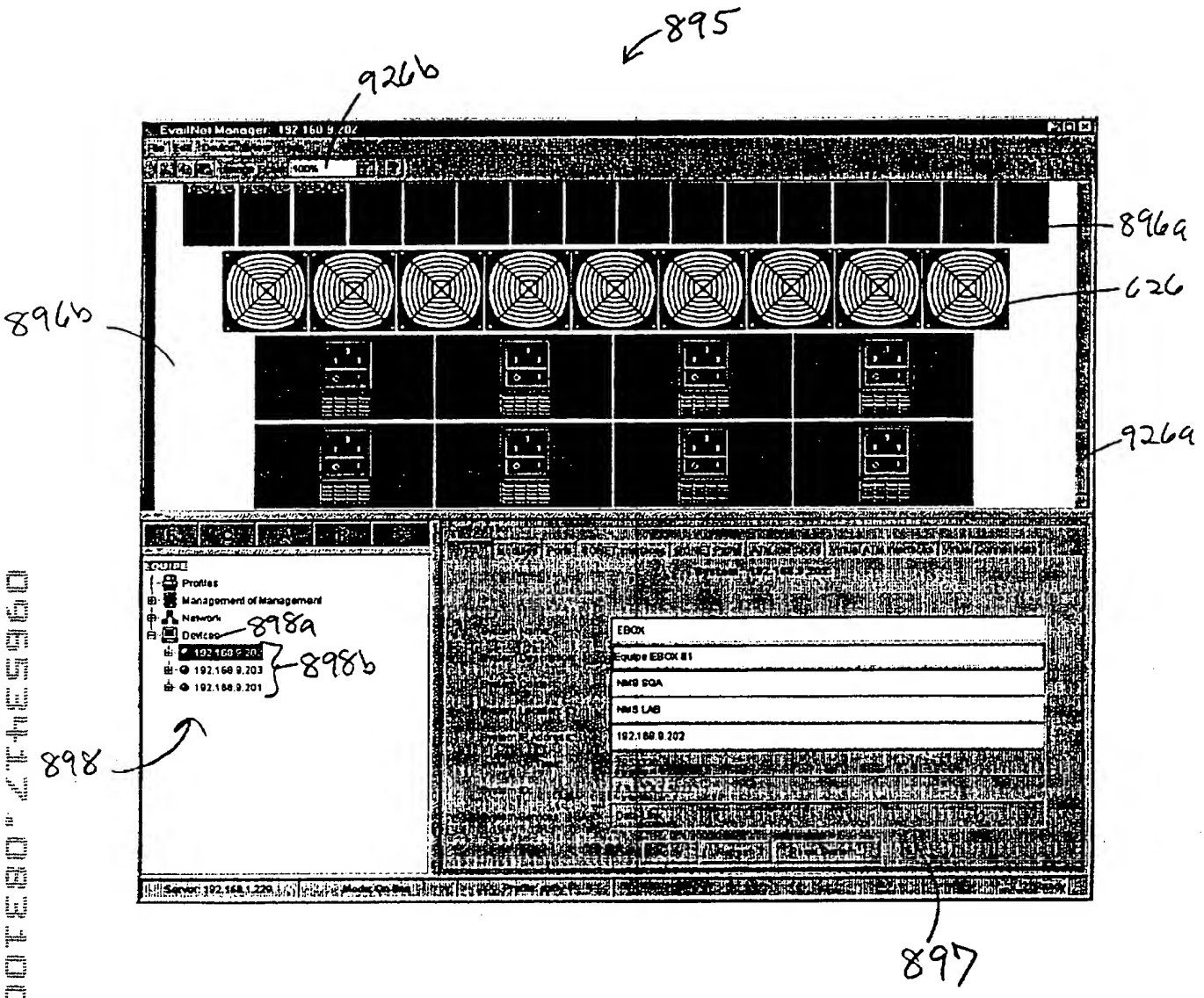


Fig. 4K

0695434.1 08300.400

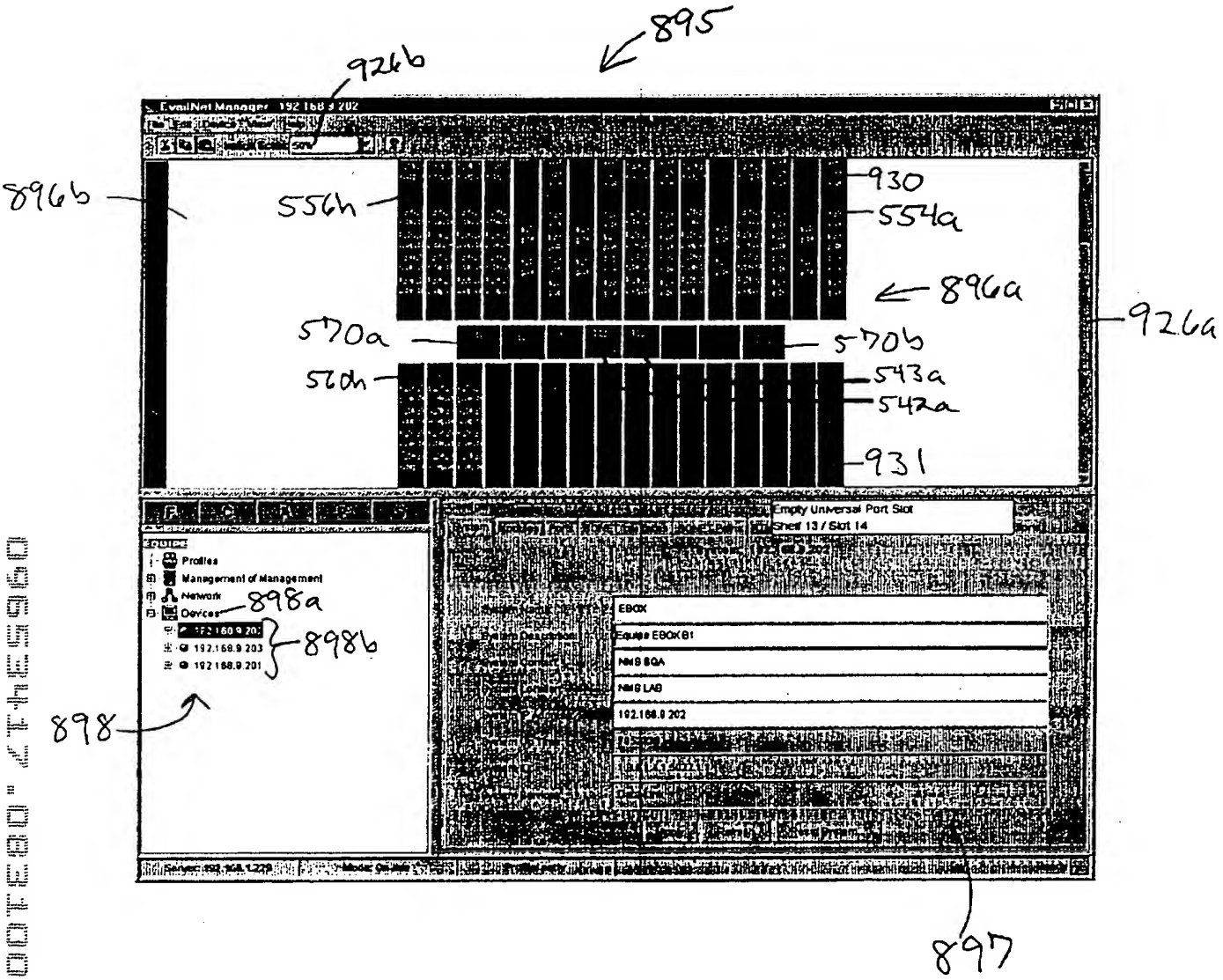


Fig. 41

00E2804-2F45950

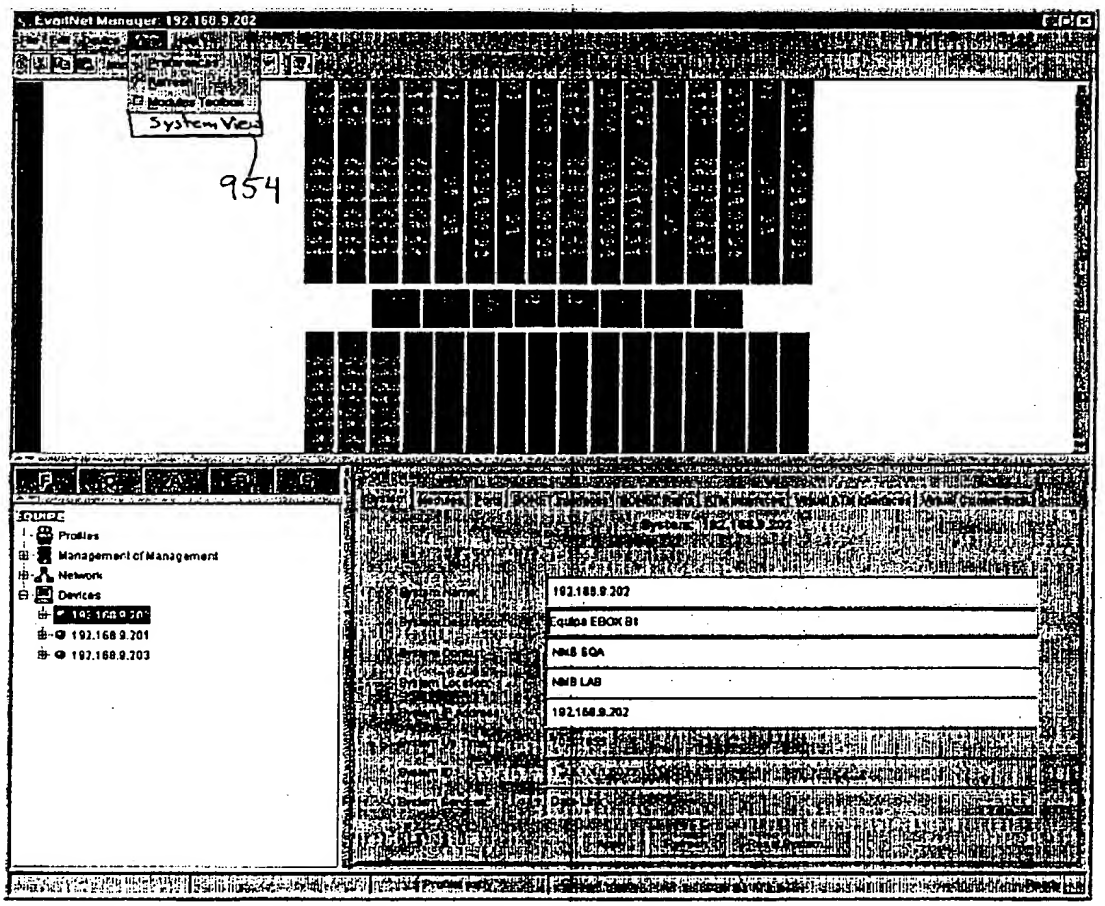


Fig. 4m

DOCKET ALARM

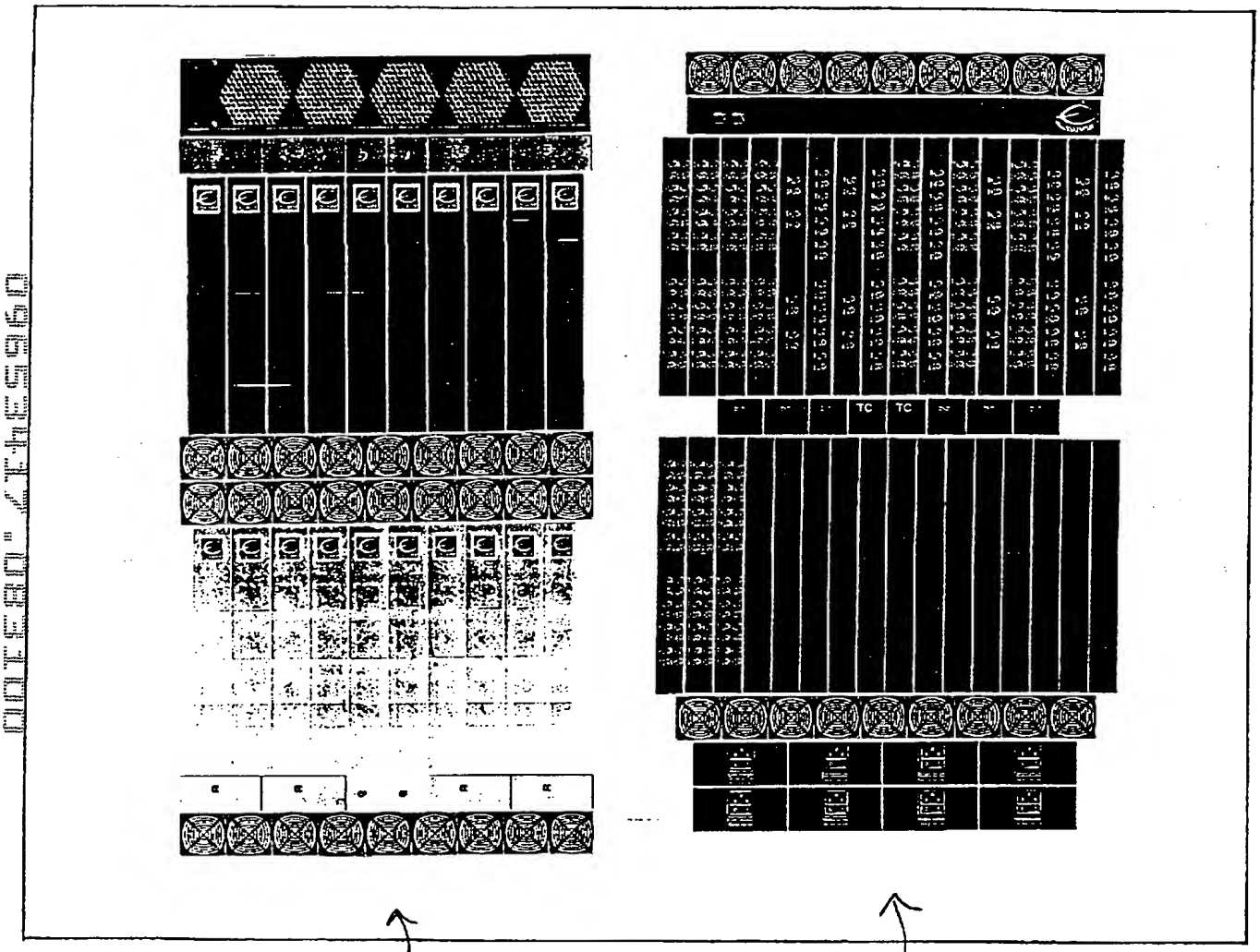


Fig. 4n

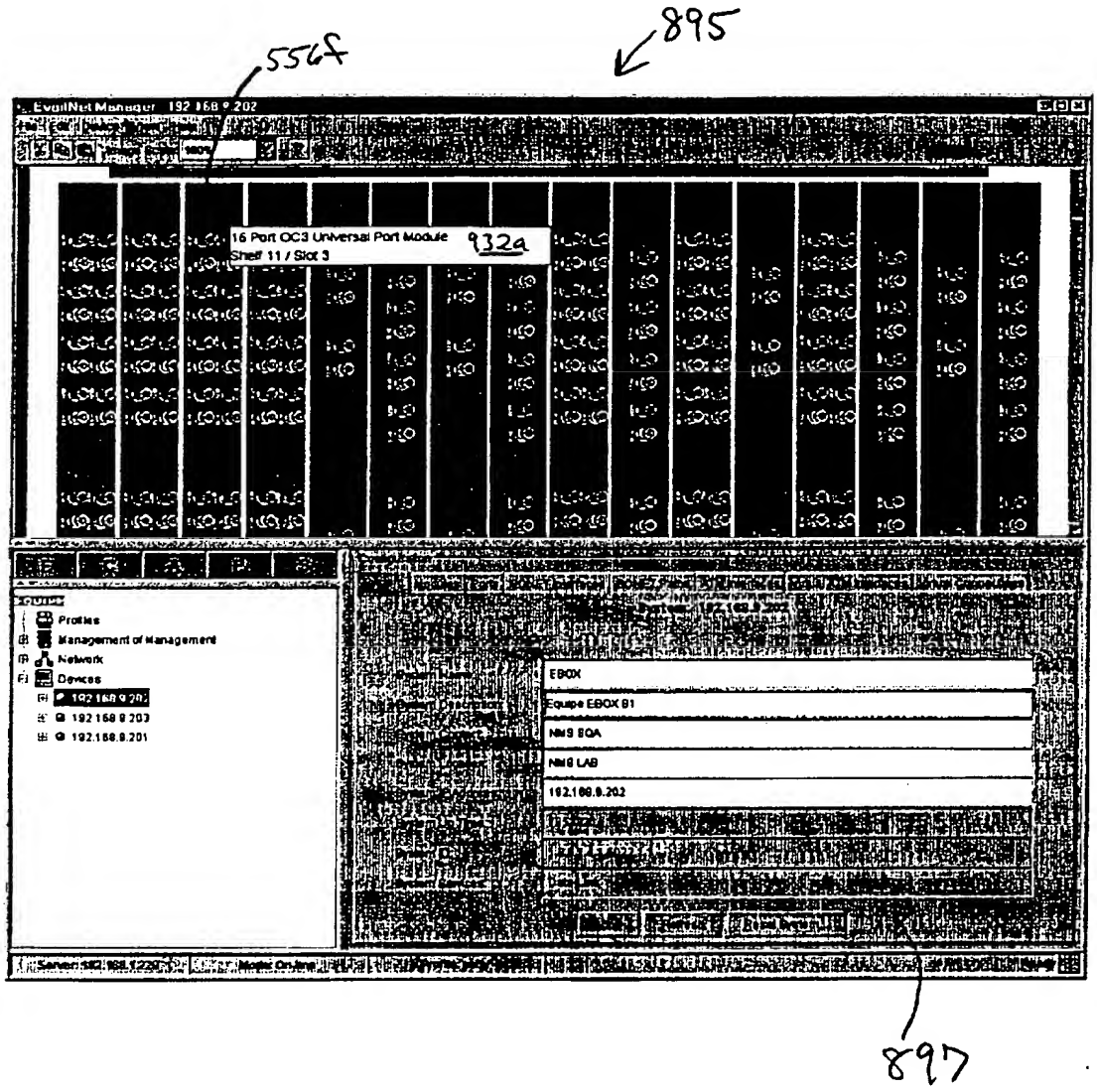


Fig. 40

DOCKET ALARM

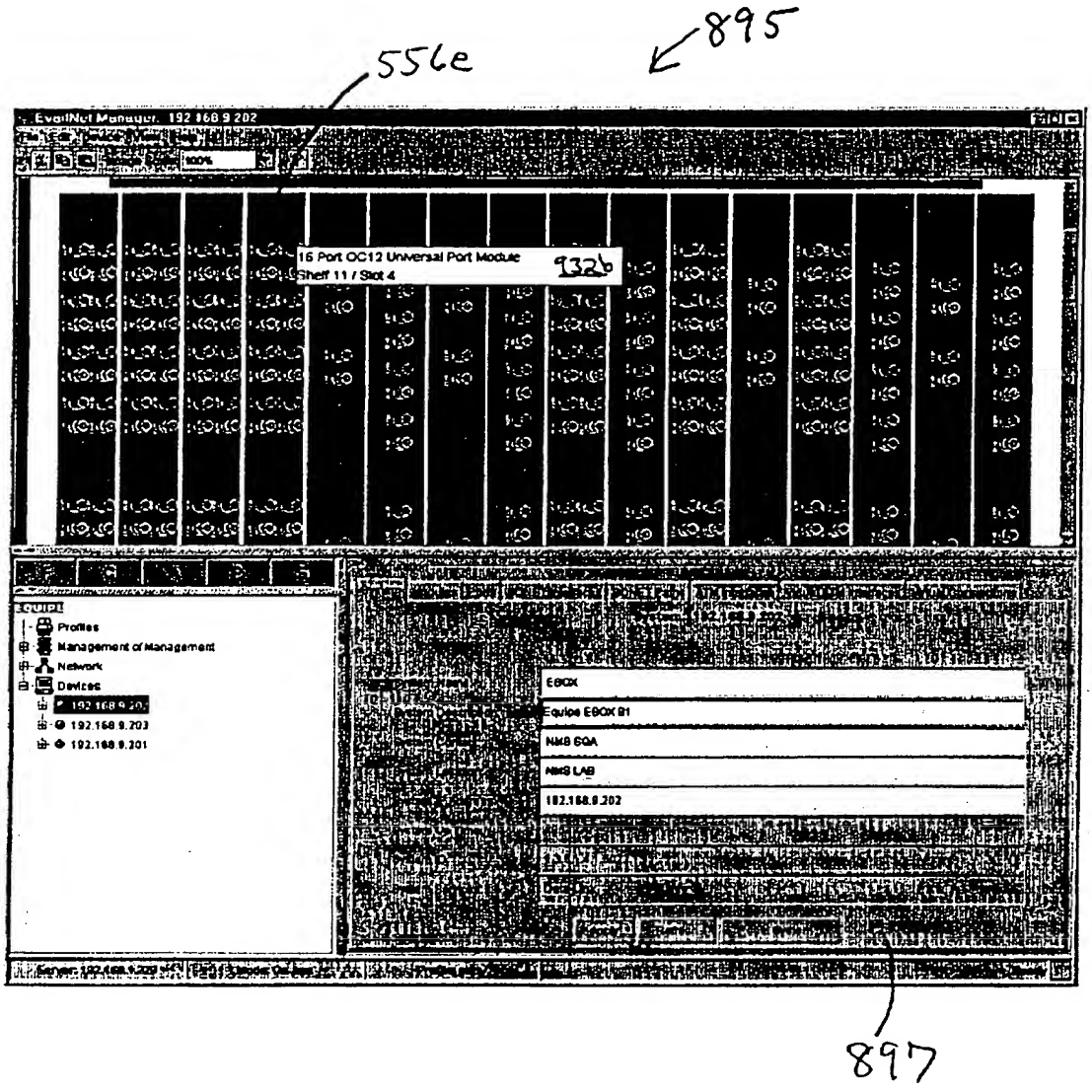


Fig. 4p

DOCKET ALARM

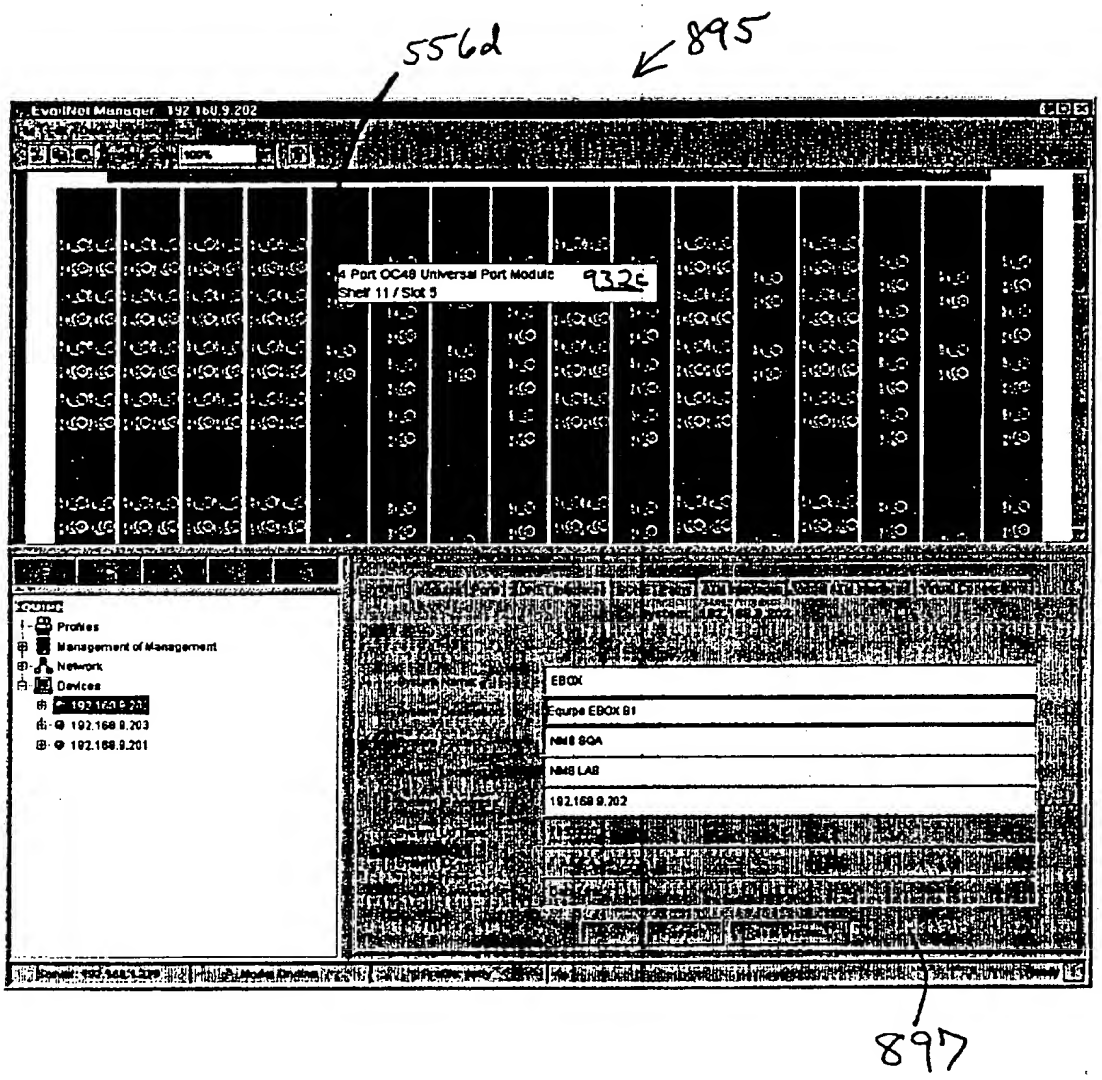


Fig. 4g

Doc 3 pg 18

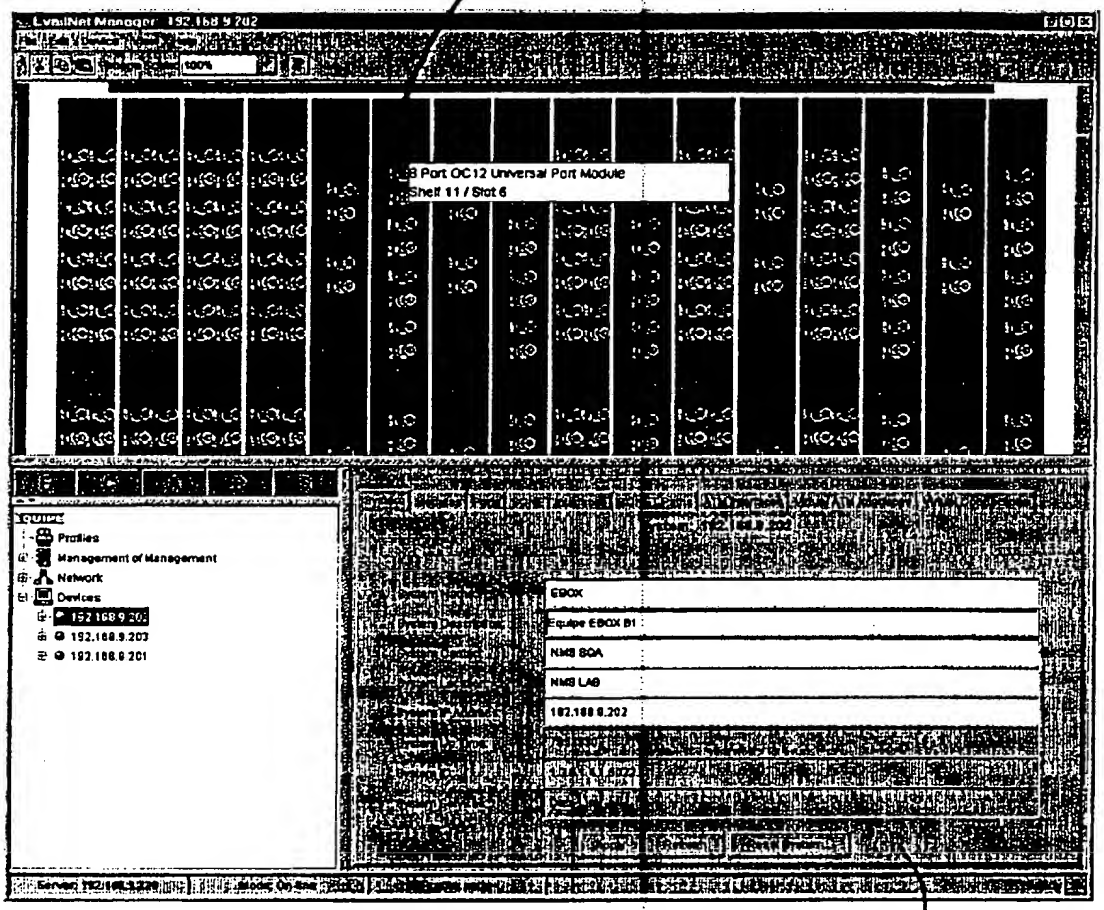


Fig. 4r

DOCKET ALARM

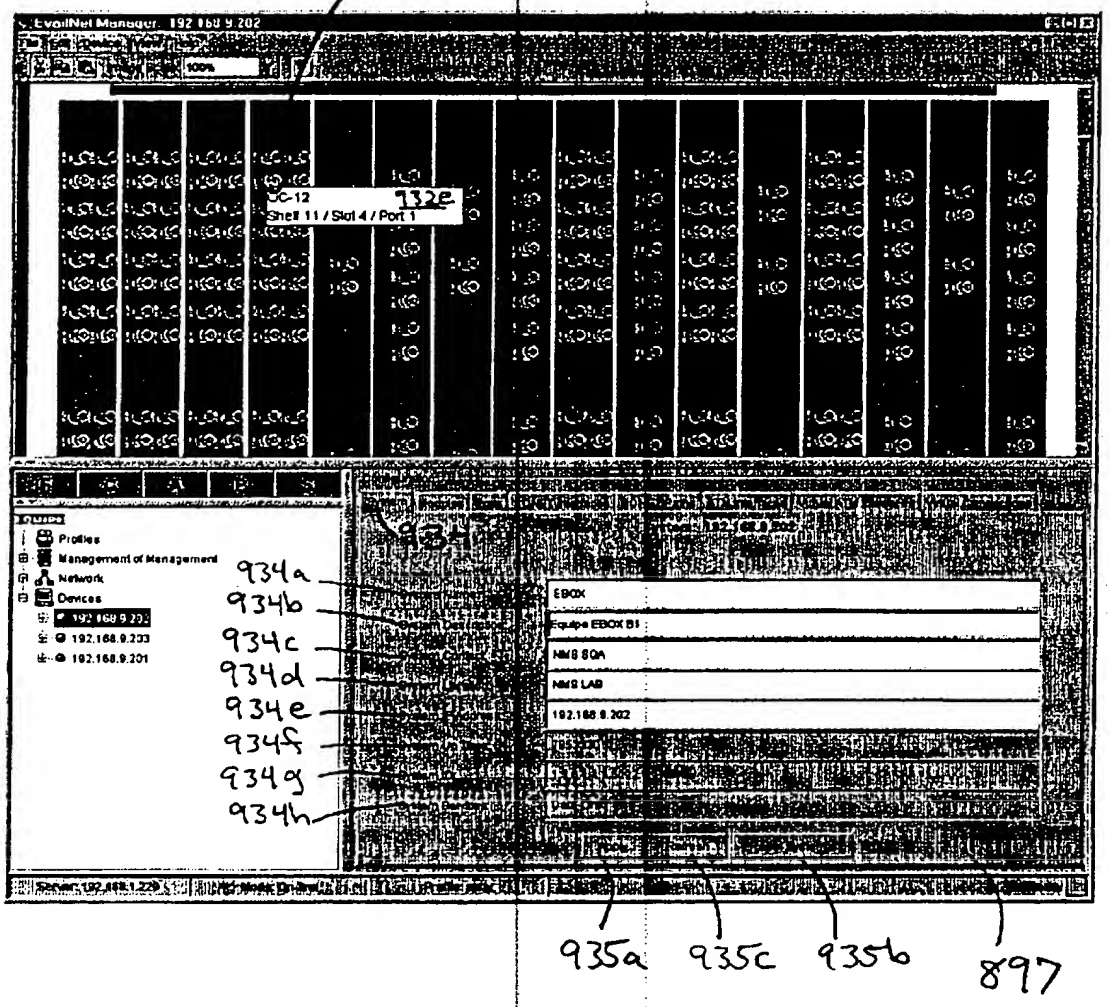


Fig. 4s

0075808 - 2745950.0

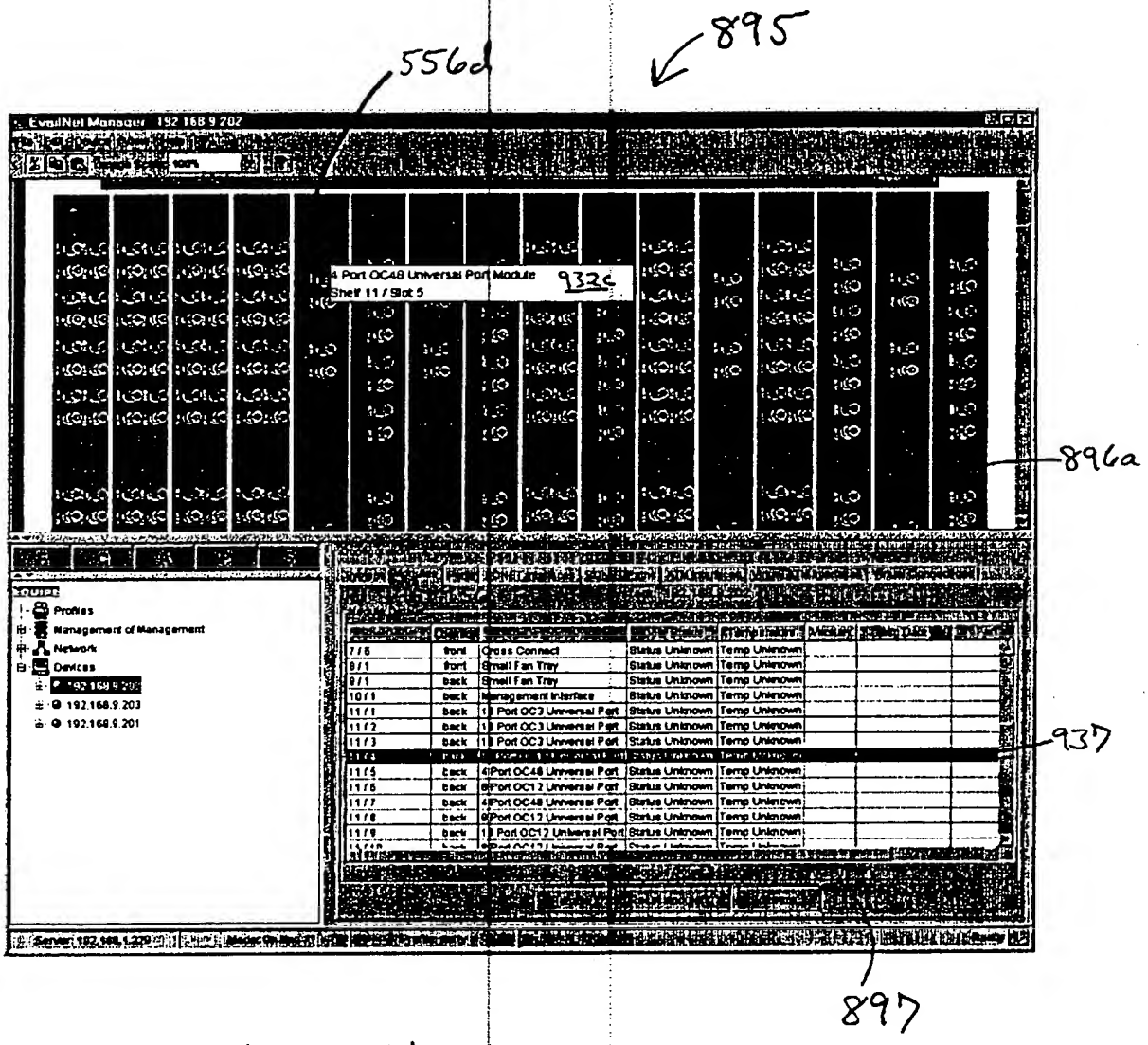


Fig. 47

DOCKET ALARM

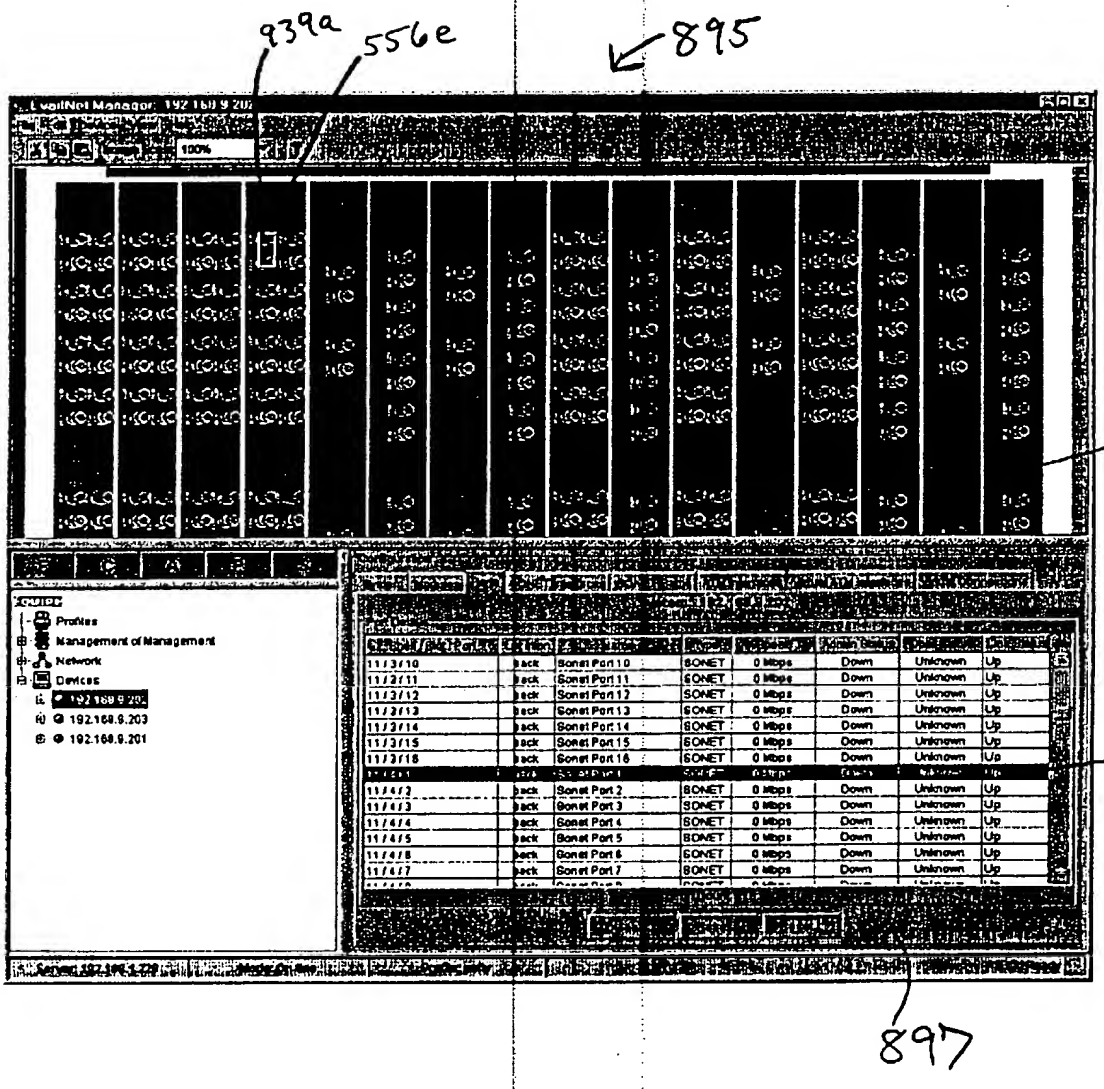


Fig. 4u

0015800.3.1.5.5.0

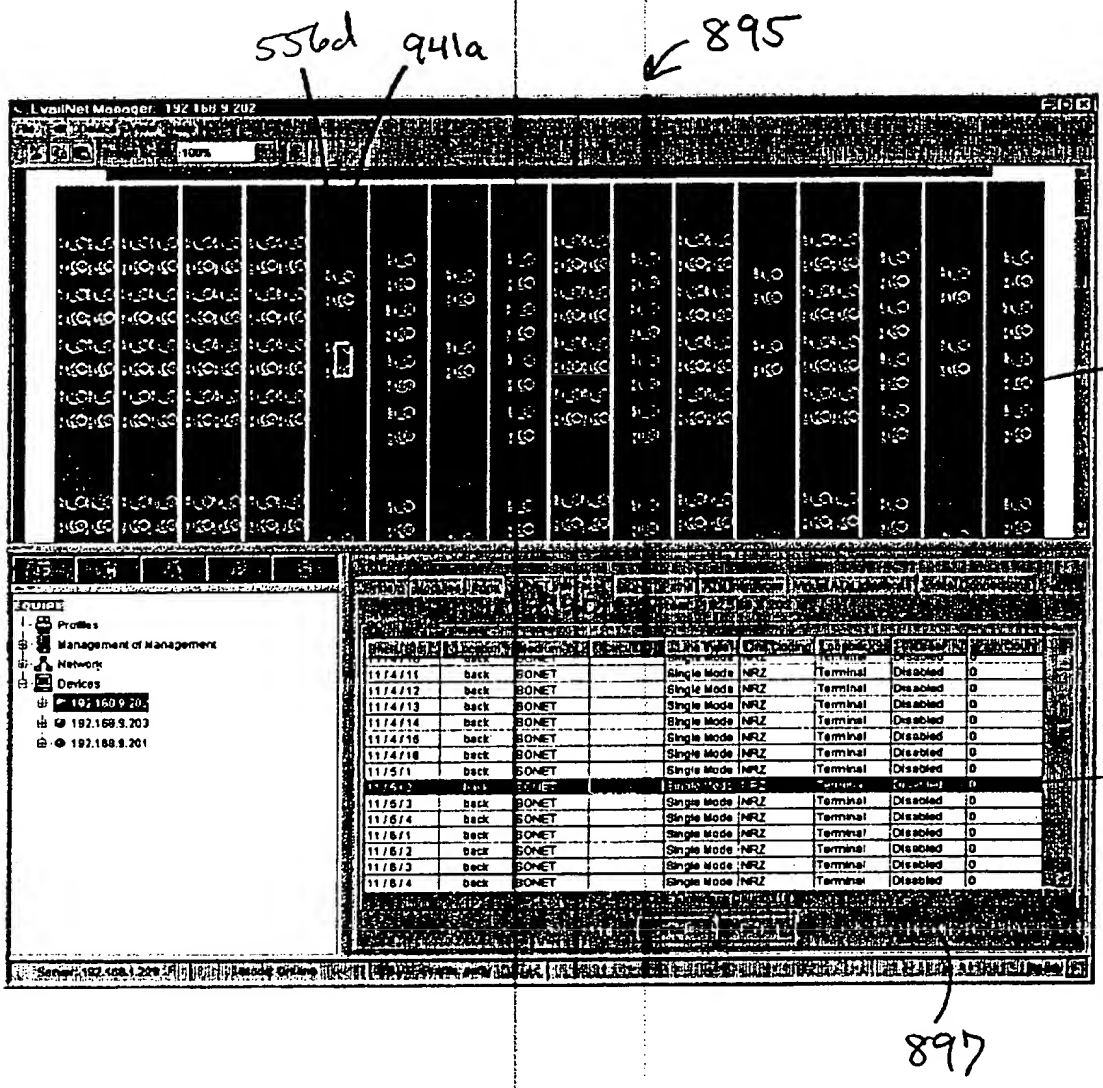


Fig. 4v

DOCKET ALARM

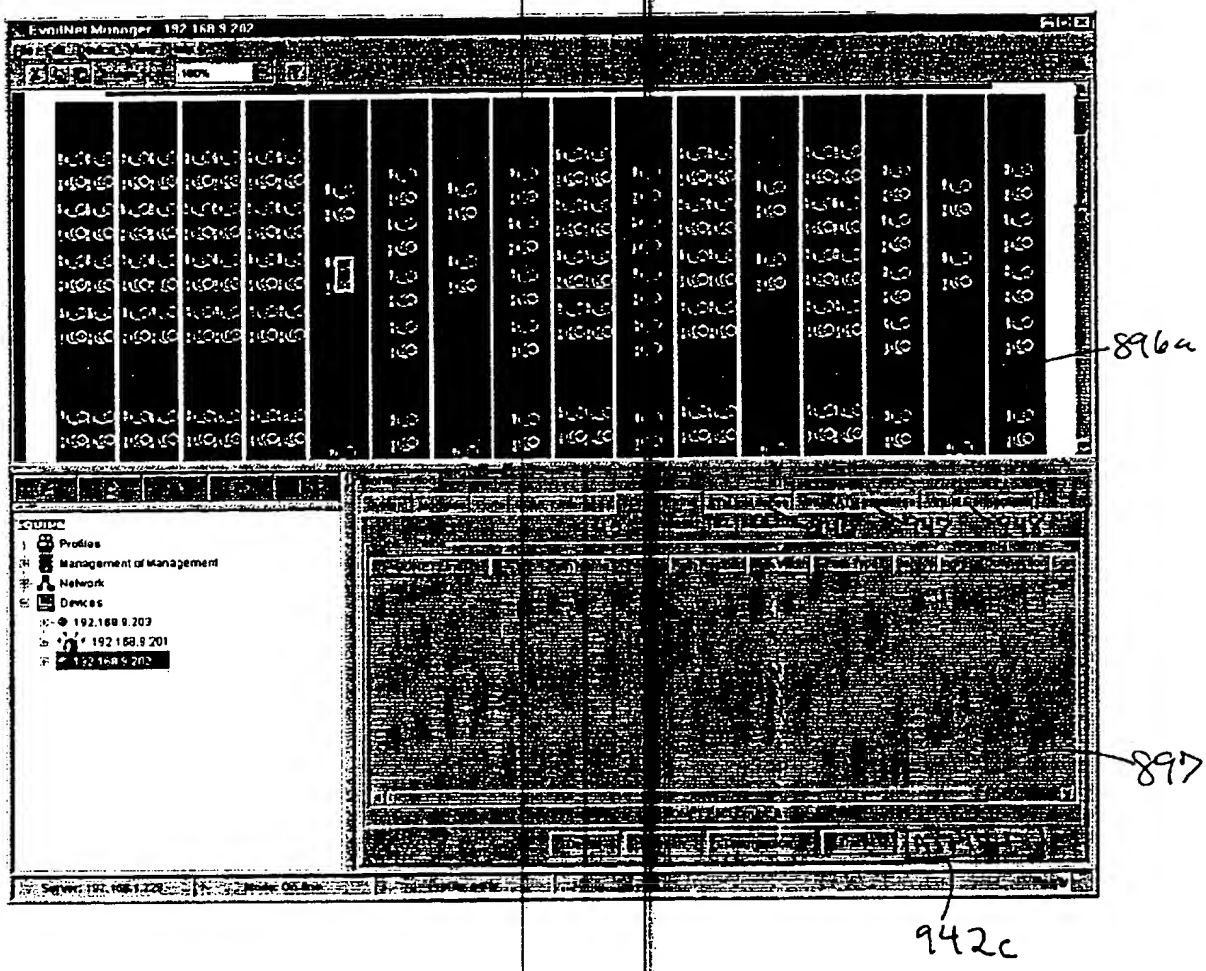


Fig. 4W

09534200

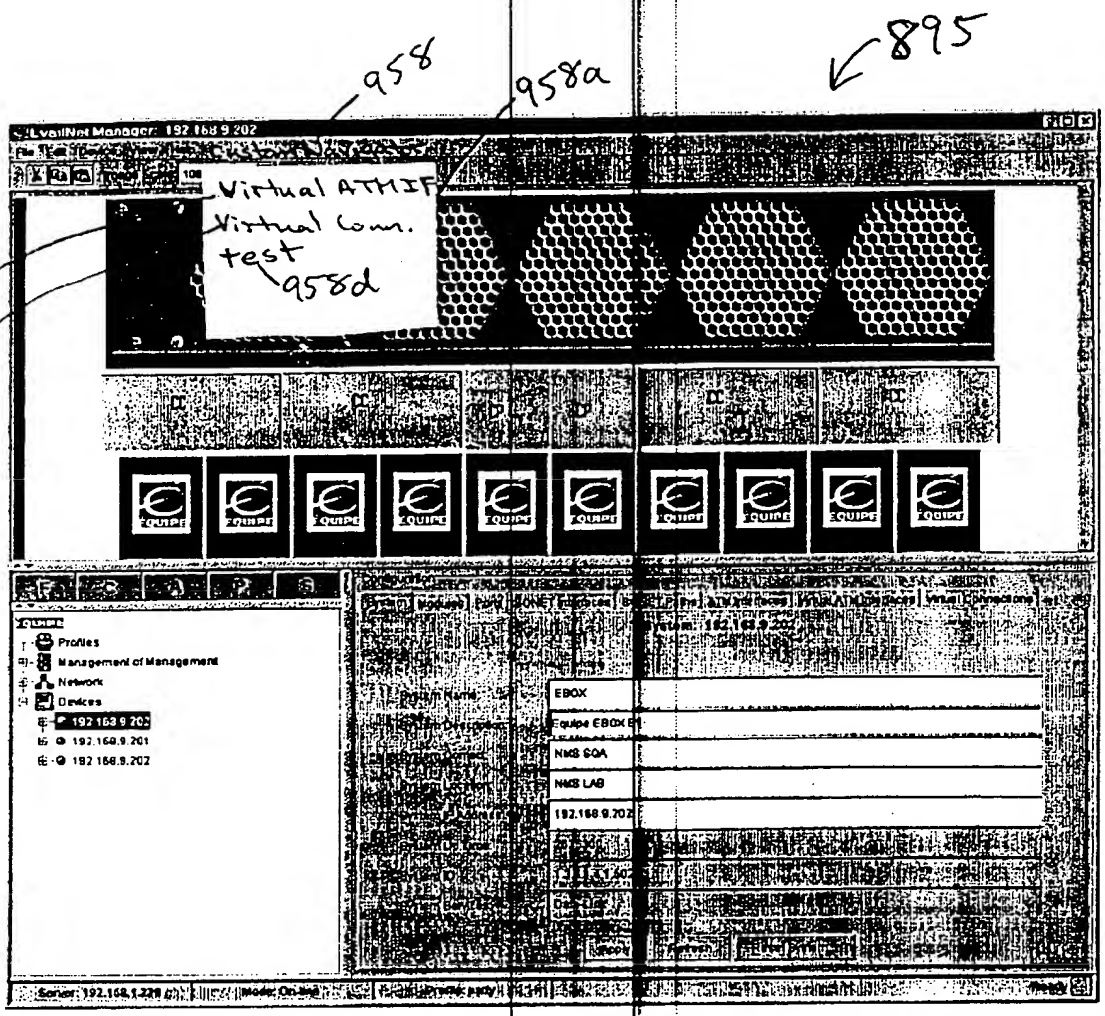


Fig. 4x

DOCKET NO. 7456.960

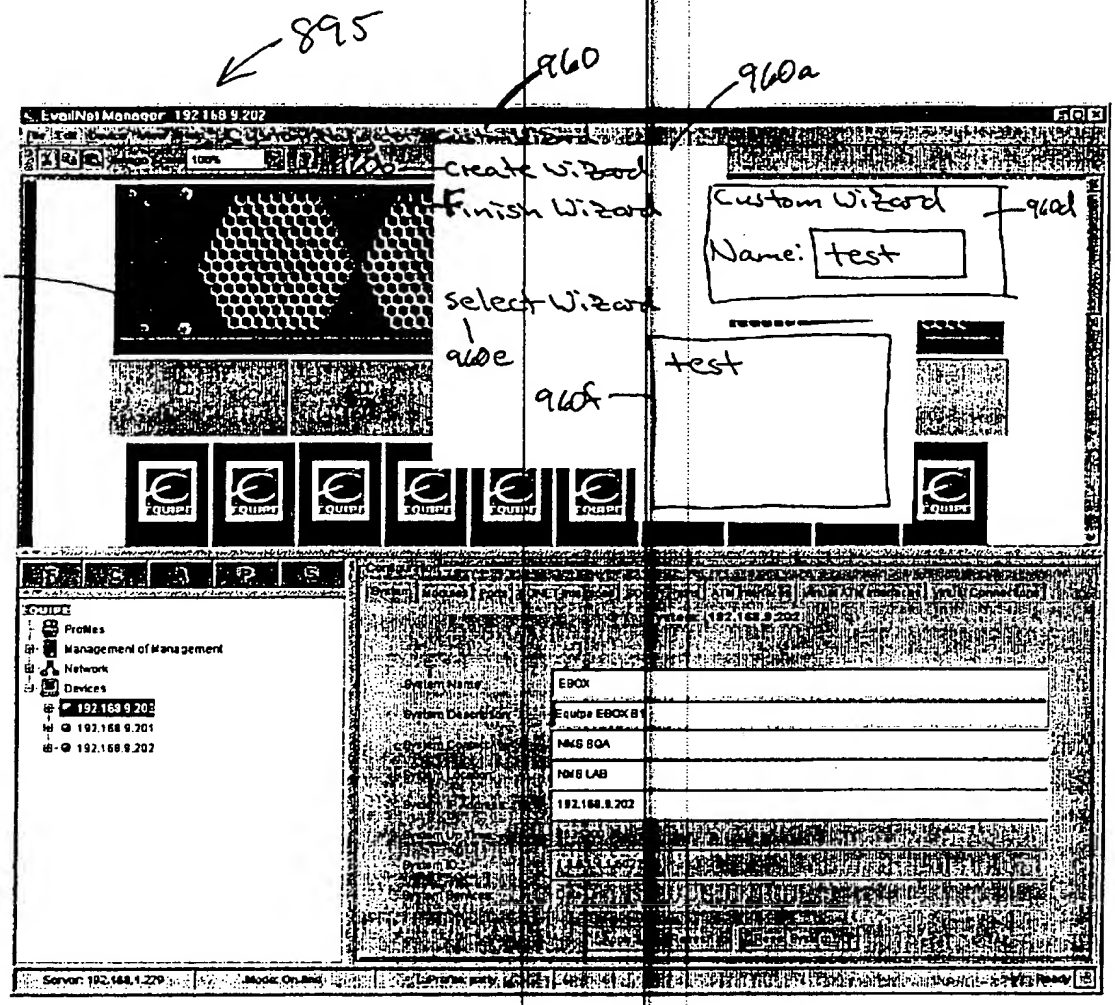


Fig. 4y

09E3650.V1

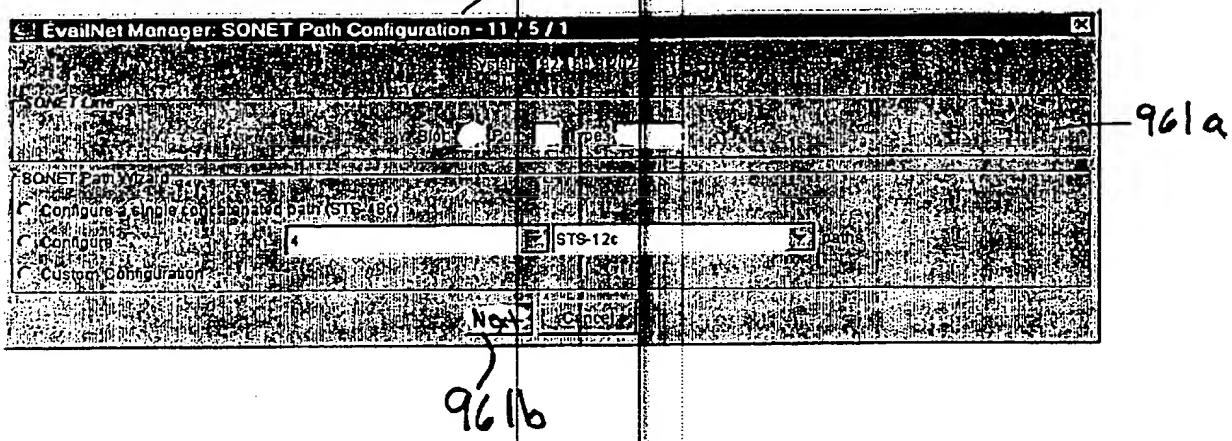


Fig. 42

09543750 '00E3E0

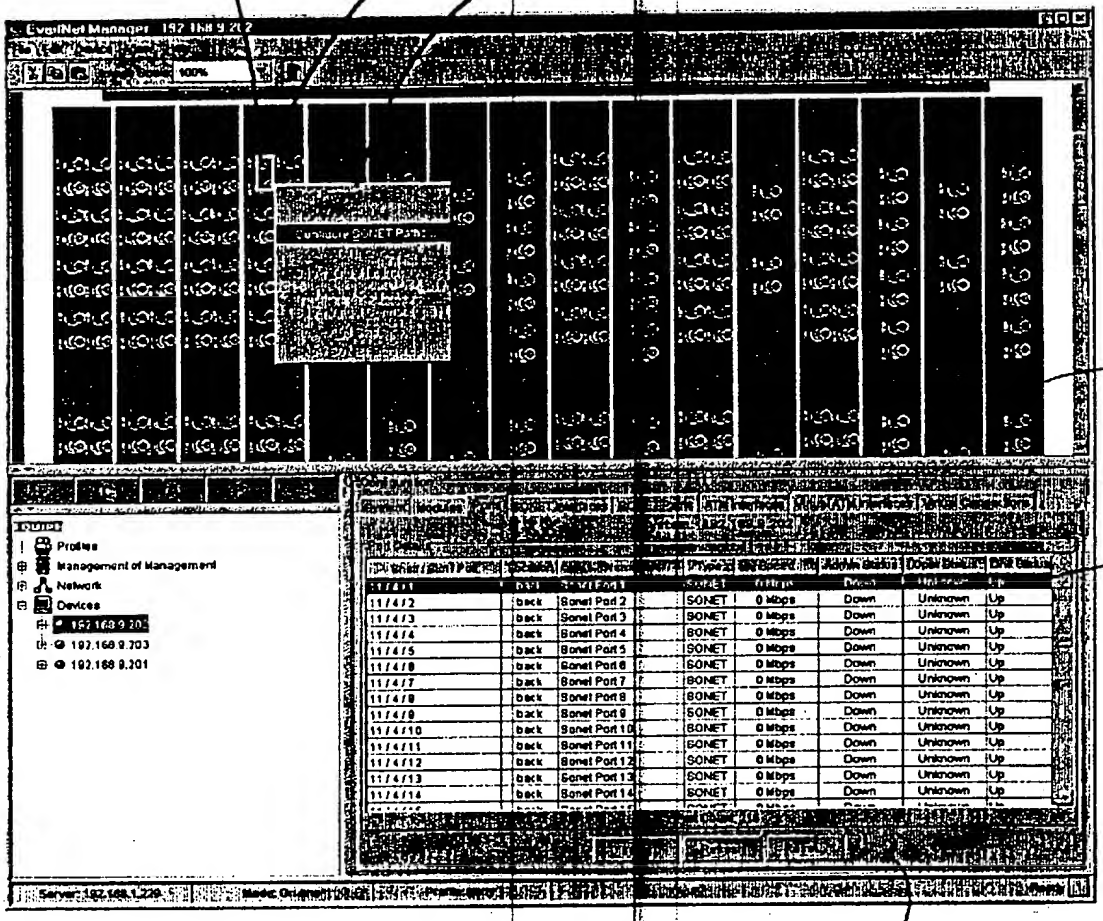


Fig. 5a

DOCSIS-2.0-050429

Fig. 5b

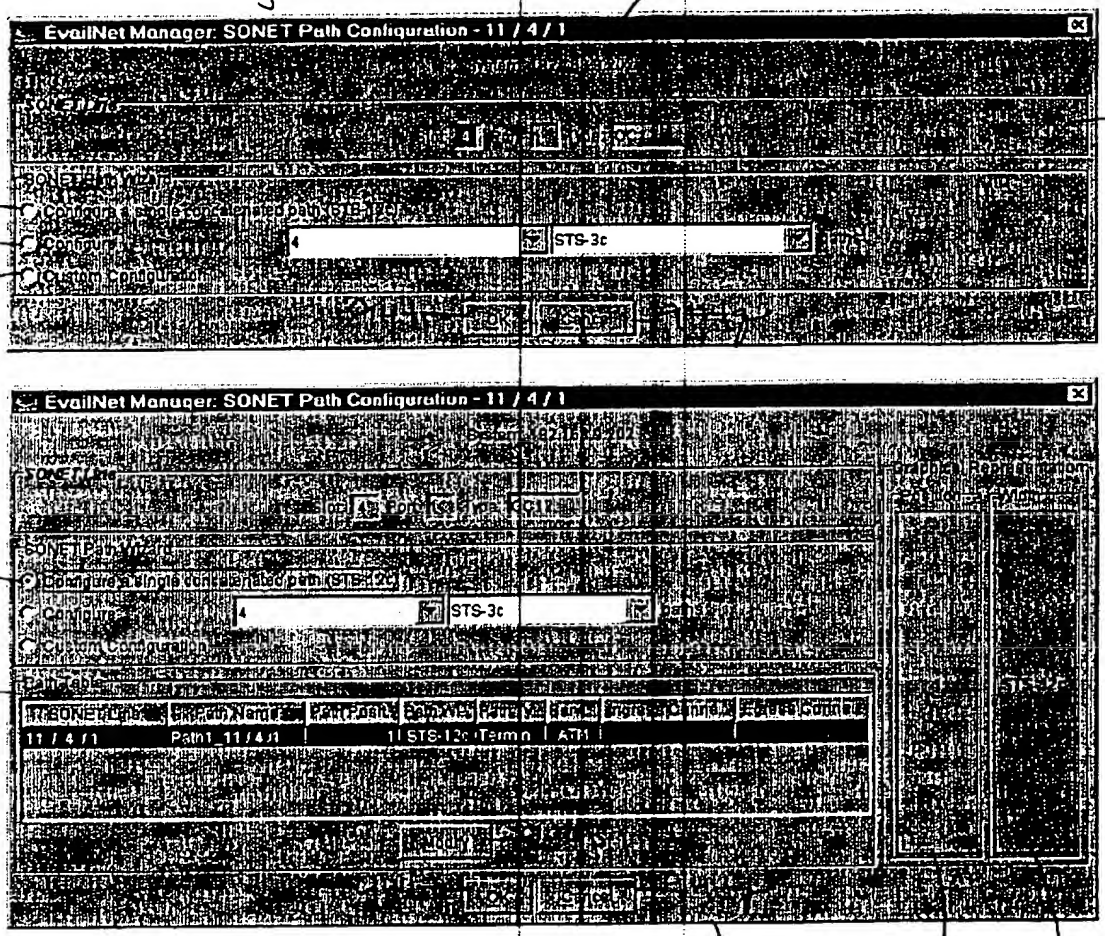
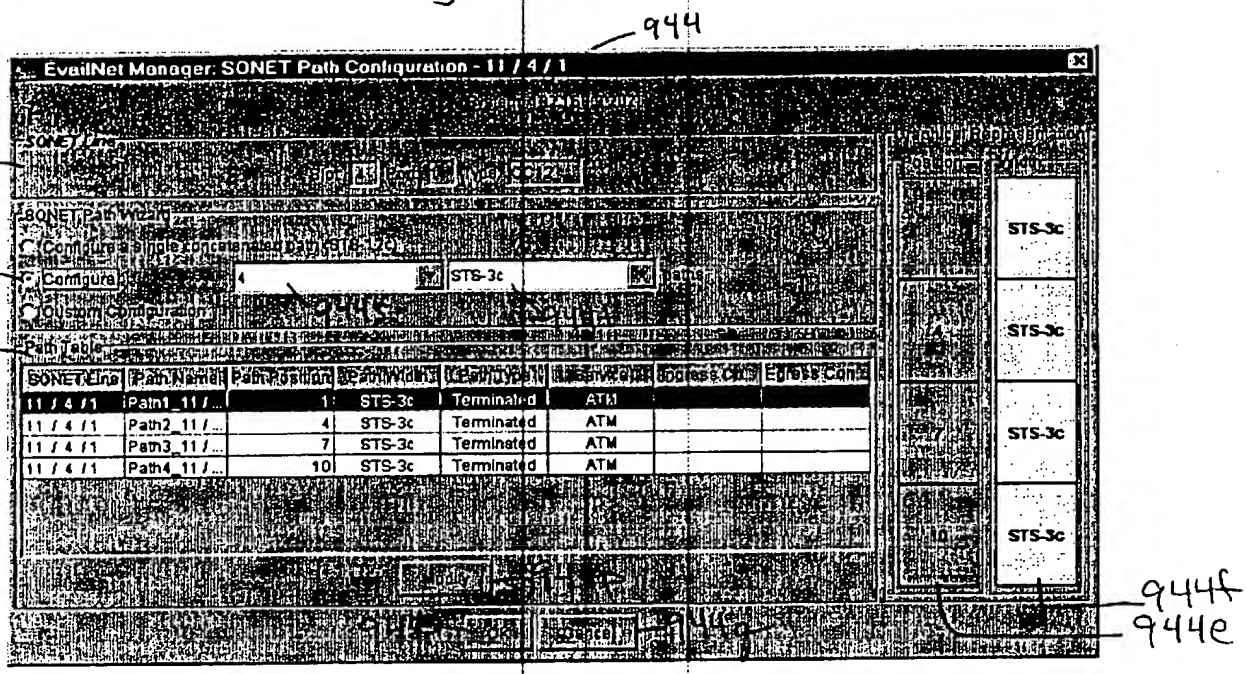

944
EvalNet Manager: SONET Path Configuration - 11 / 4 / 1
944a
944b
944c
944d
STS-3c
EvalNet Manager: SONET Path Configuration - 11 / 4 / 1
944b
944g
STS-3c
944
944e
944f

Fig. 5c

Fig. 5d



Doc #: 1-3-5-5-0

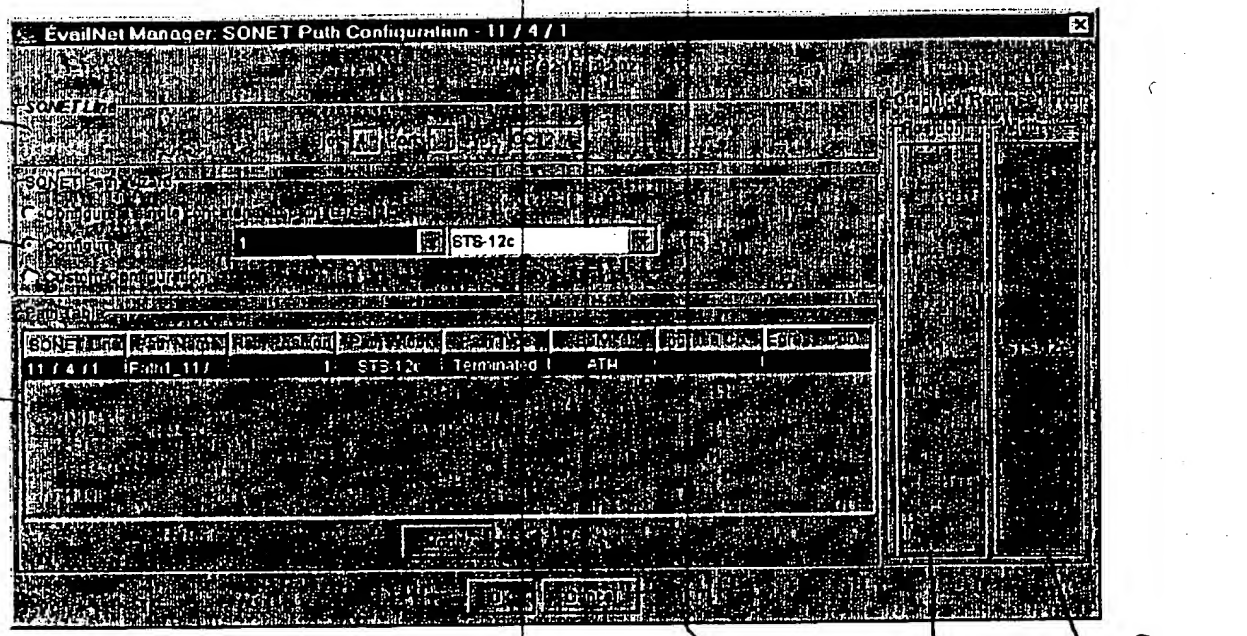
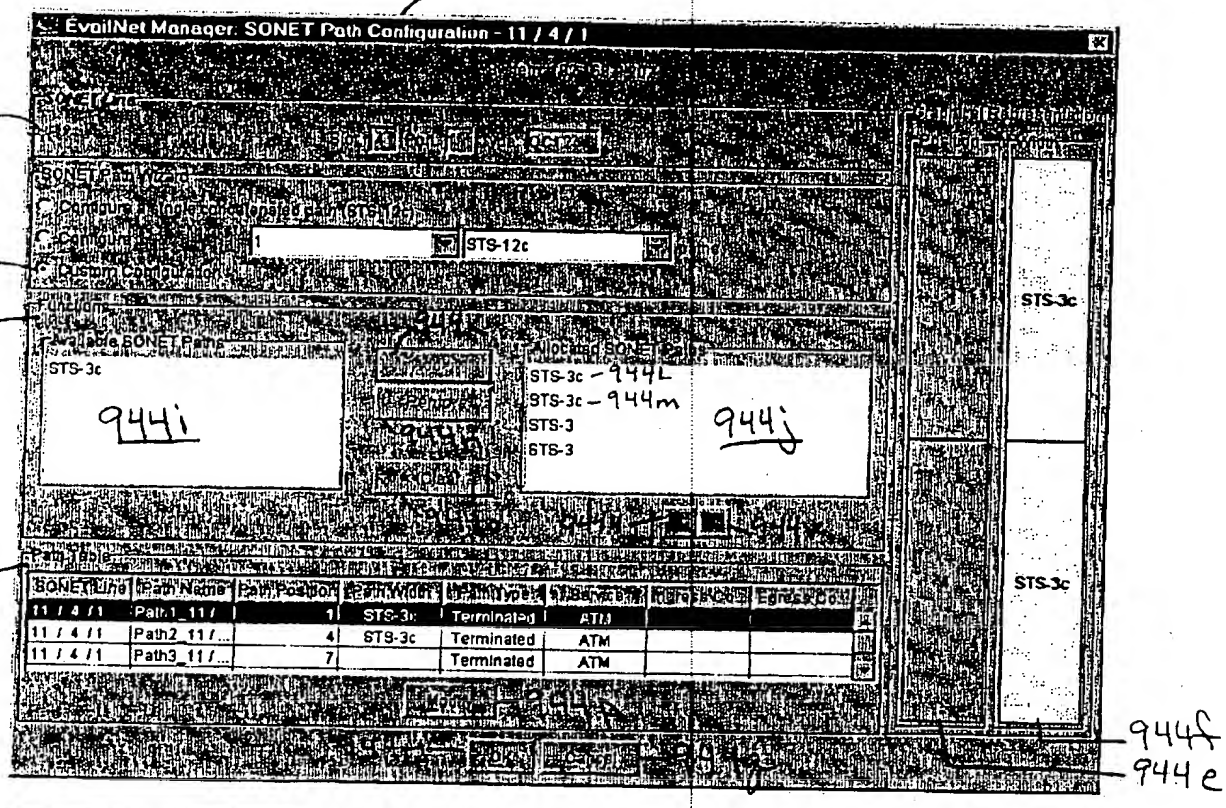


Fig. 5e

Fig. 5f


944
EvailNet Manager: SONET Path Configuration - 11 / 4 / 1
944a
944d
944h
STS-12c
Custom Configuration
Available SONET Paths
STS-3c
944i
Allocated SONET Paths
STS-3c - 944L
STS-3c - 944m
STS-3
STS-3
944j
944g
SONET Line
Path Name
Path Position
Path Width
Path Type
Service Type
Terminated
ATM
11 / 4 / 1
Path1_11 /...
Path2_11 /...
Path3_11 /...
STS-3c
944f
944e

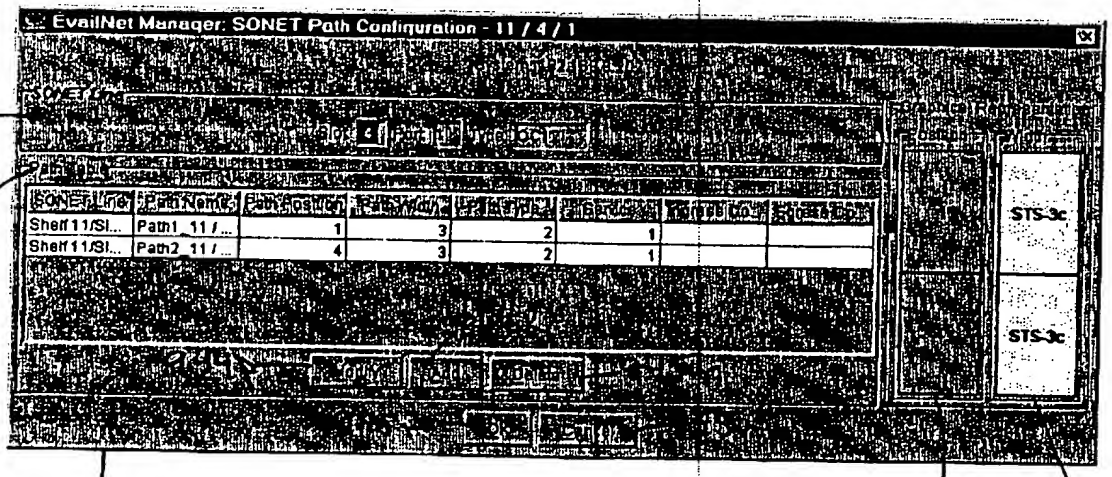

EvailNet Manager: SONET Path Configuration - 11 / 4 / 1
945a
945g
Shelf 11/Sl...
Path1_11 /...
Path2_11 /...
STS-3c
945
945e
945f

Fig. 5g

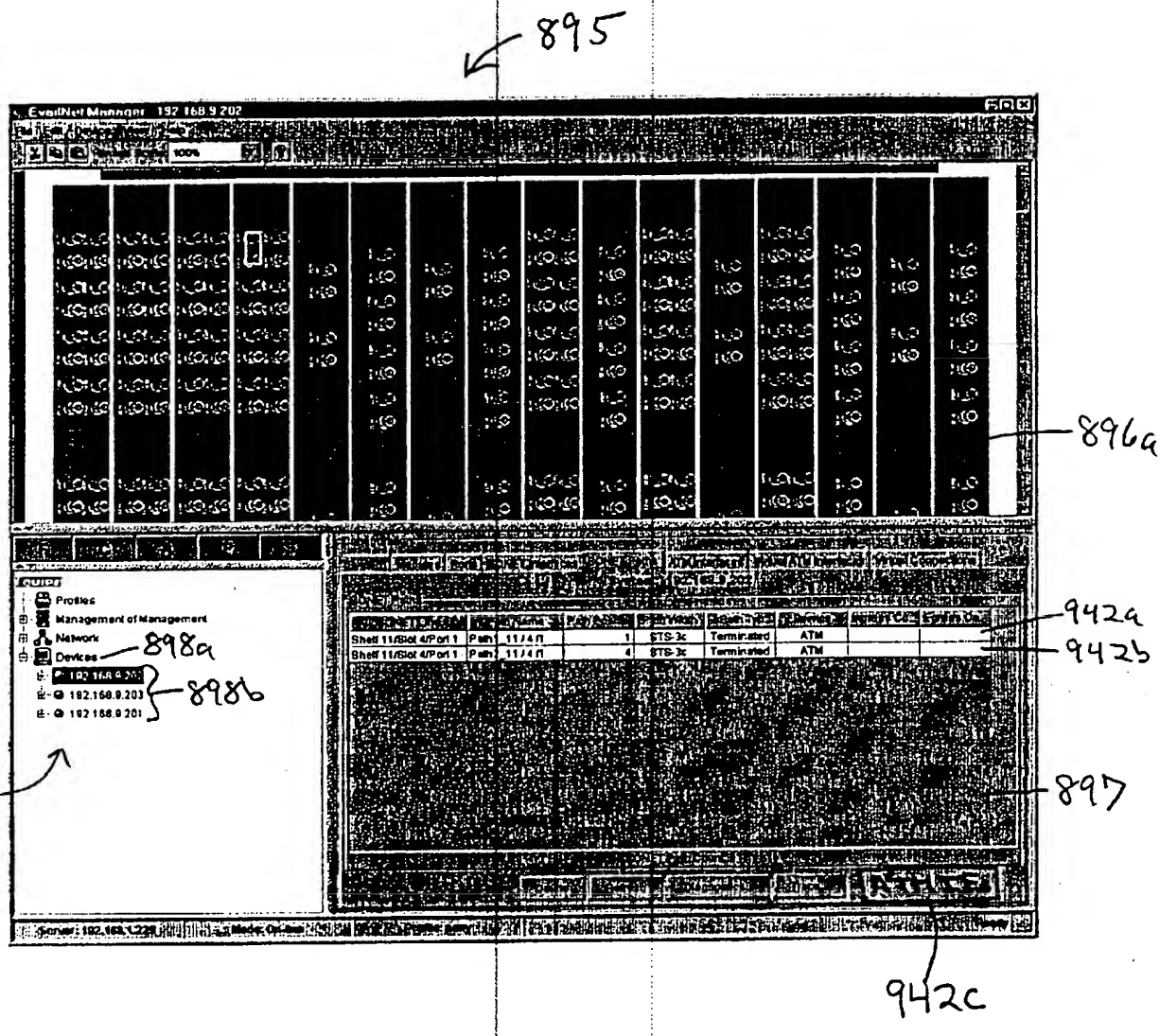


Fig. 5h

09-29-03 12:58pm from-Equipe Communications

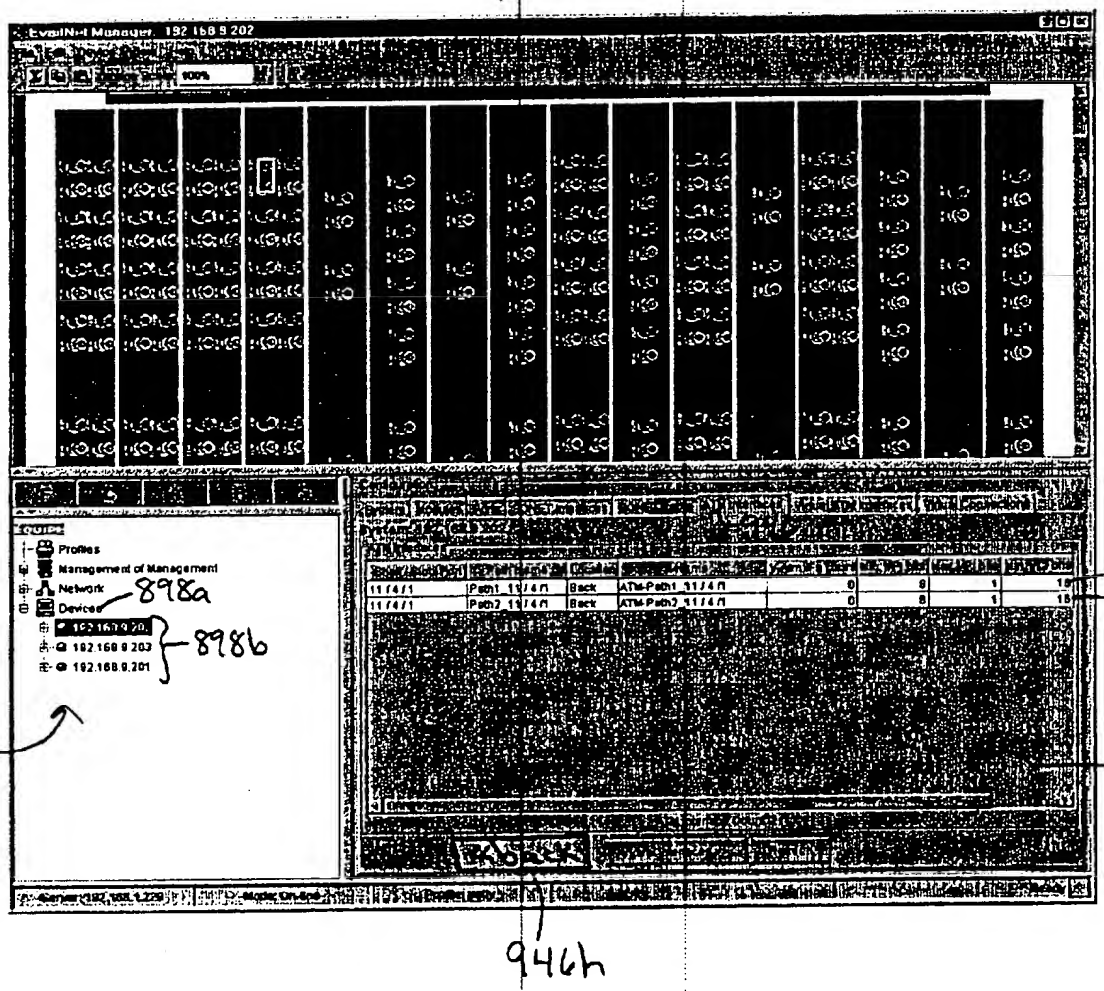


Fig. 5i

08-29-06 : 12:59 : 7817952031 # 7/20

Fig. 5j

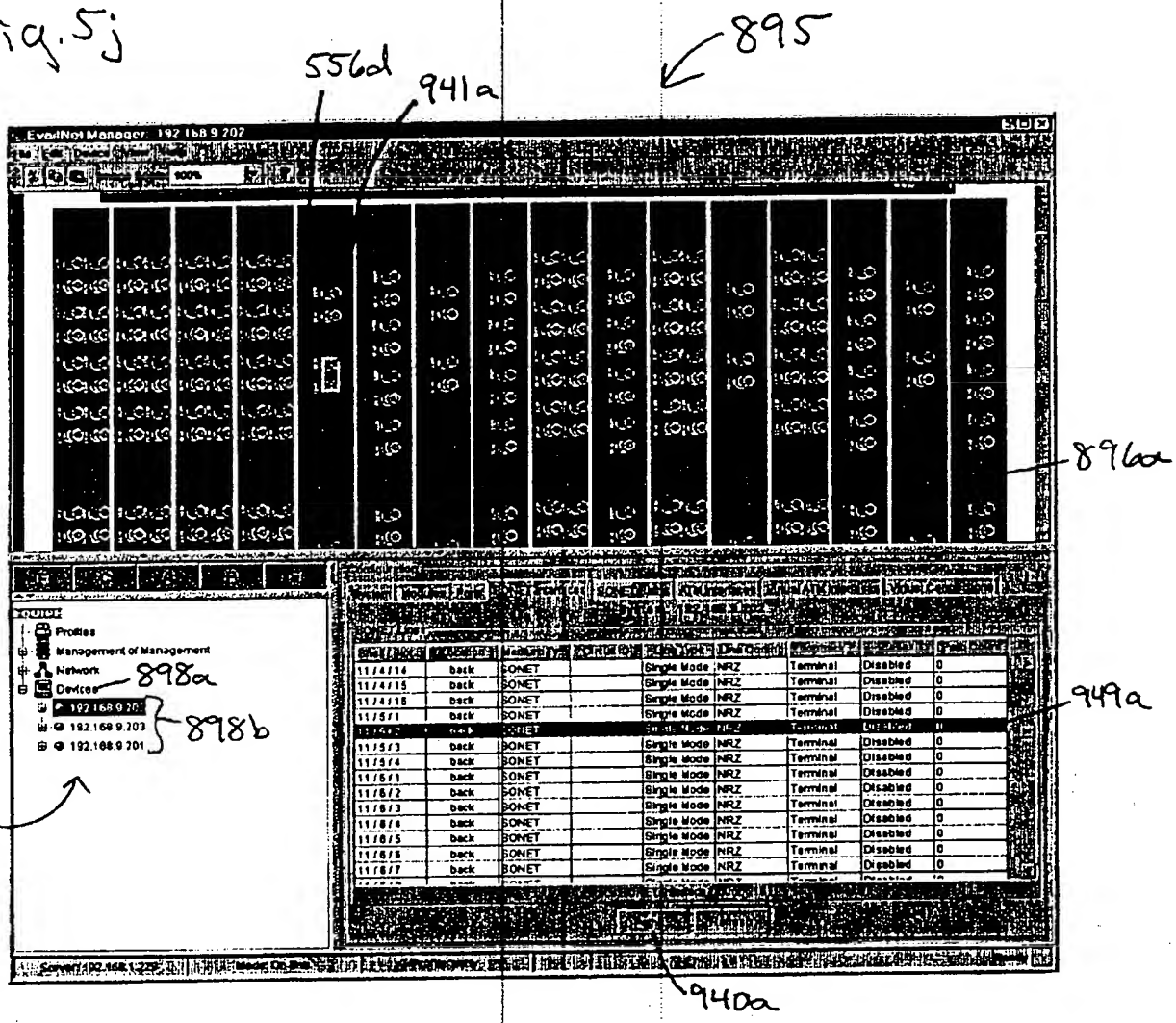

895
556d
941a
896a
898a
898b
898
949a
940a

Fig. 5K

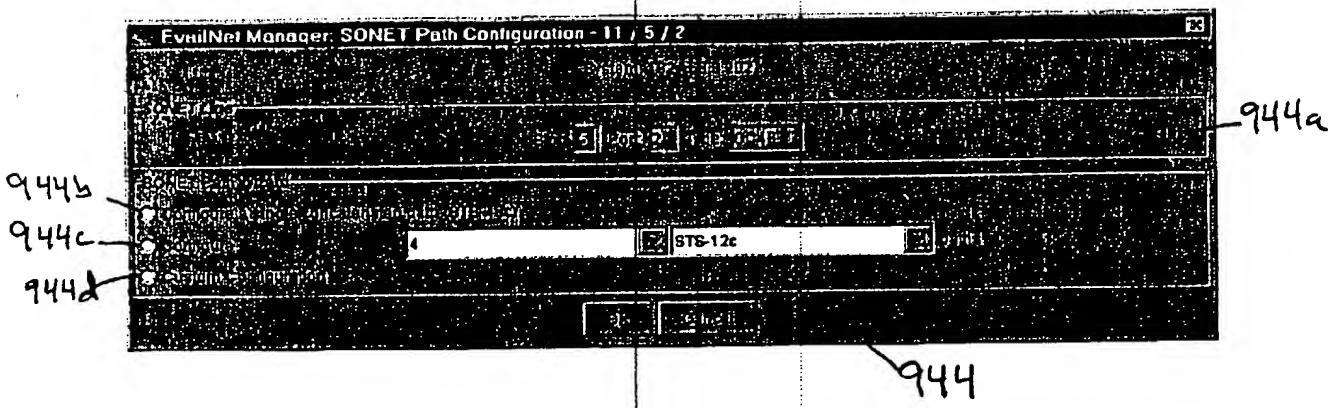
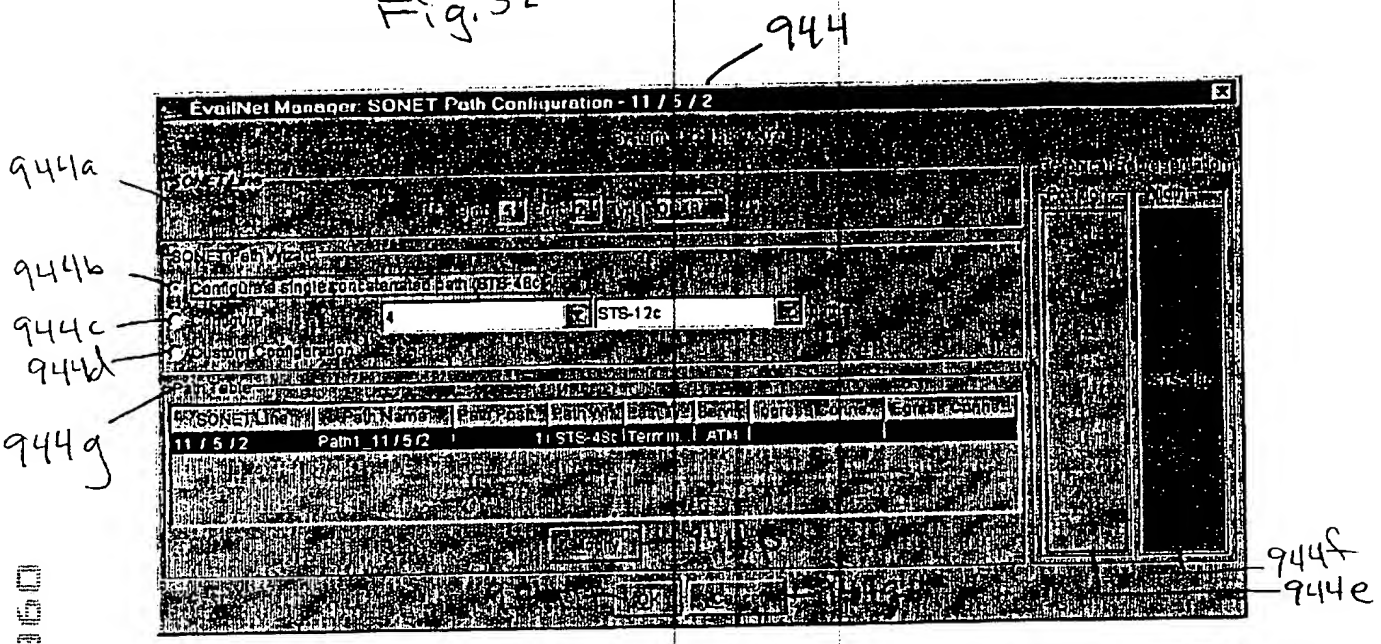

EvenNet Manager: SONET Path Configuration - 11 / 5 / 2
944a
944b
944c
944d
STS-12c
944

Fig. 5L


944
EvailNet Manager: SONET Path Configuration - 11 / 5 / 2
944a
944b
944c
944d
944g
944f
944e
STS-12c
11 / 5 / 2
Path1_11/5/2
STS-48c
Term.
ATM

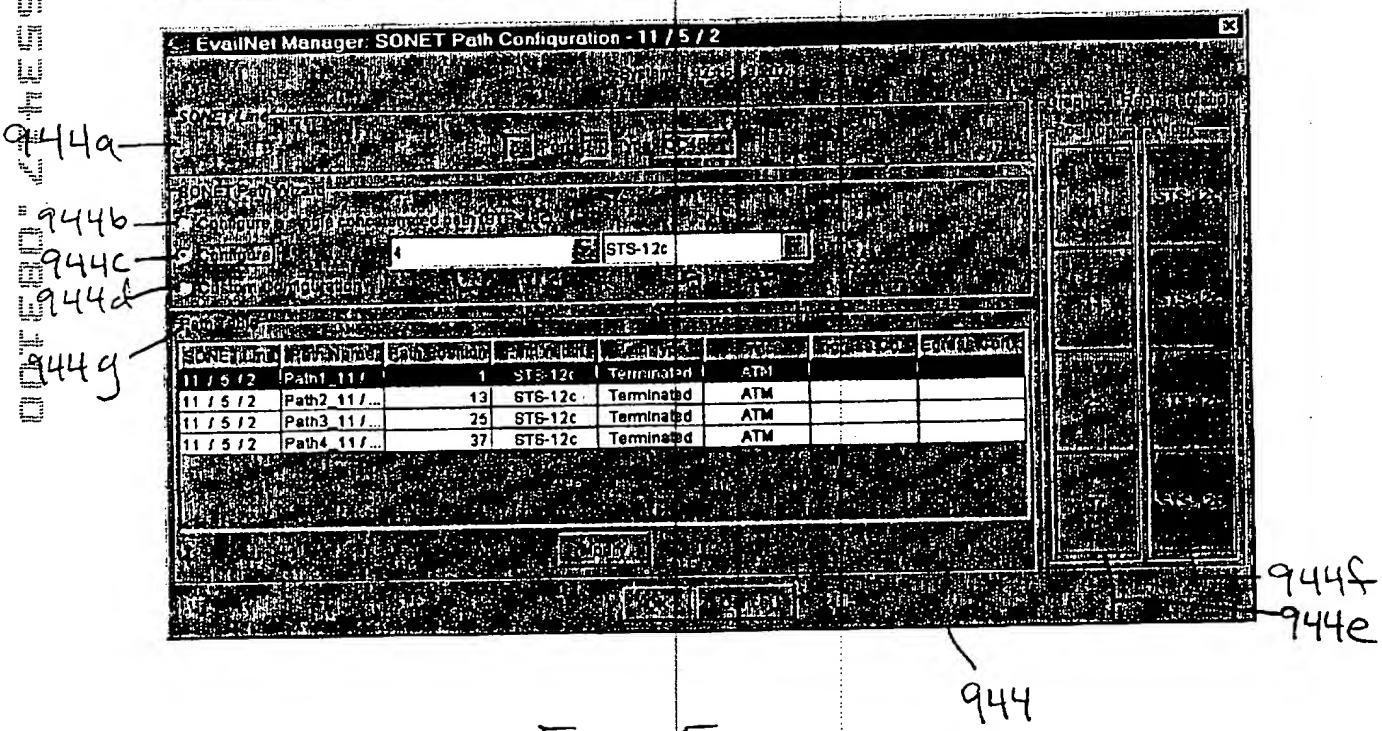

EvailNet Manager: SONET Path Configuration - 11 / 5 / 2
944a
944b
944c
944d
944g
944f
944e
944
STS-12c
11 / 5 / 2
Path1_11 /
1
STS-12c
Terminated
ATM
11 / 5 / 2
Path2_11 /...
13
STS-12c
Terminated
ATM
11 / 5 / 2
Path3_11 /...
25
STS-12c
Terminated
ATM
11 / 5 / 2
Path4_11 /...
37
STS-12c
Terminated
ATM

Fig. 5m

Fig. 5n

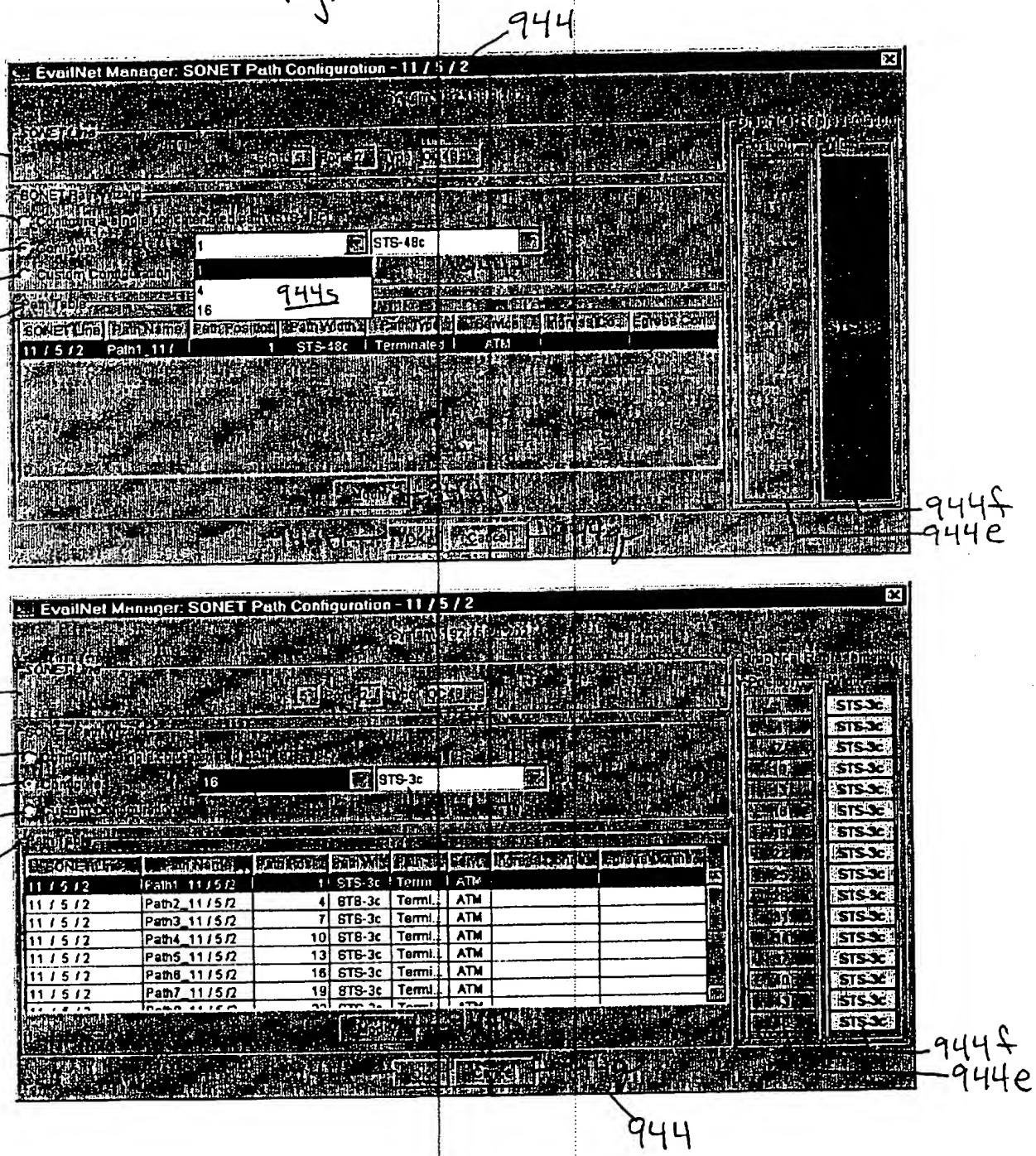

944
EvailNet Manager: SONET Path Configuration - 11 / 5 / 2
944a
944b
944c
944d
944g
944f
944e
STS-48c
STS-3c
ATM
Terminated
Path1_11 /
Path2_11 / 5 /2
Path3_11 / 5 /2
Path4_11 / 5 /2
Path5_11 / 5 /2
Path6_11 / 5 /2
Path7_11 / 5 /2

Fig. 5o

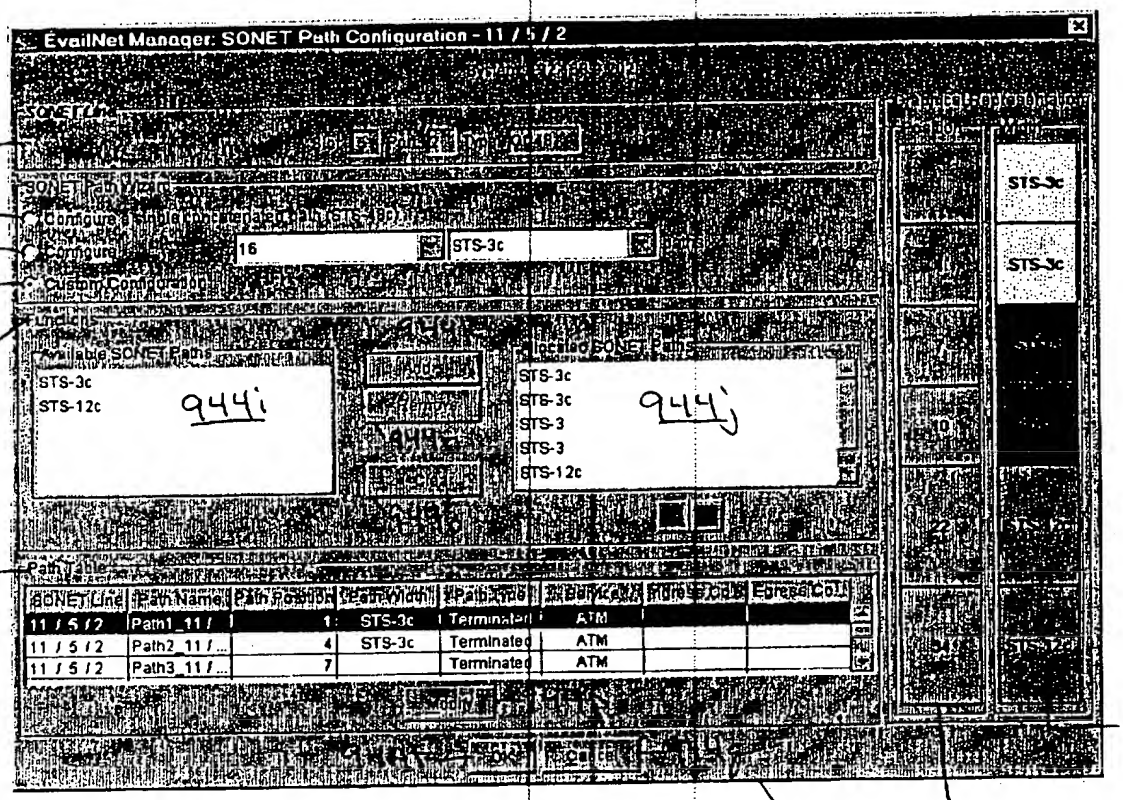


Fig. 5P

DOCKET NO. 20020

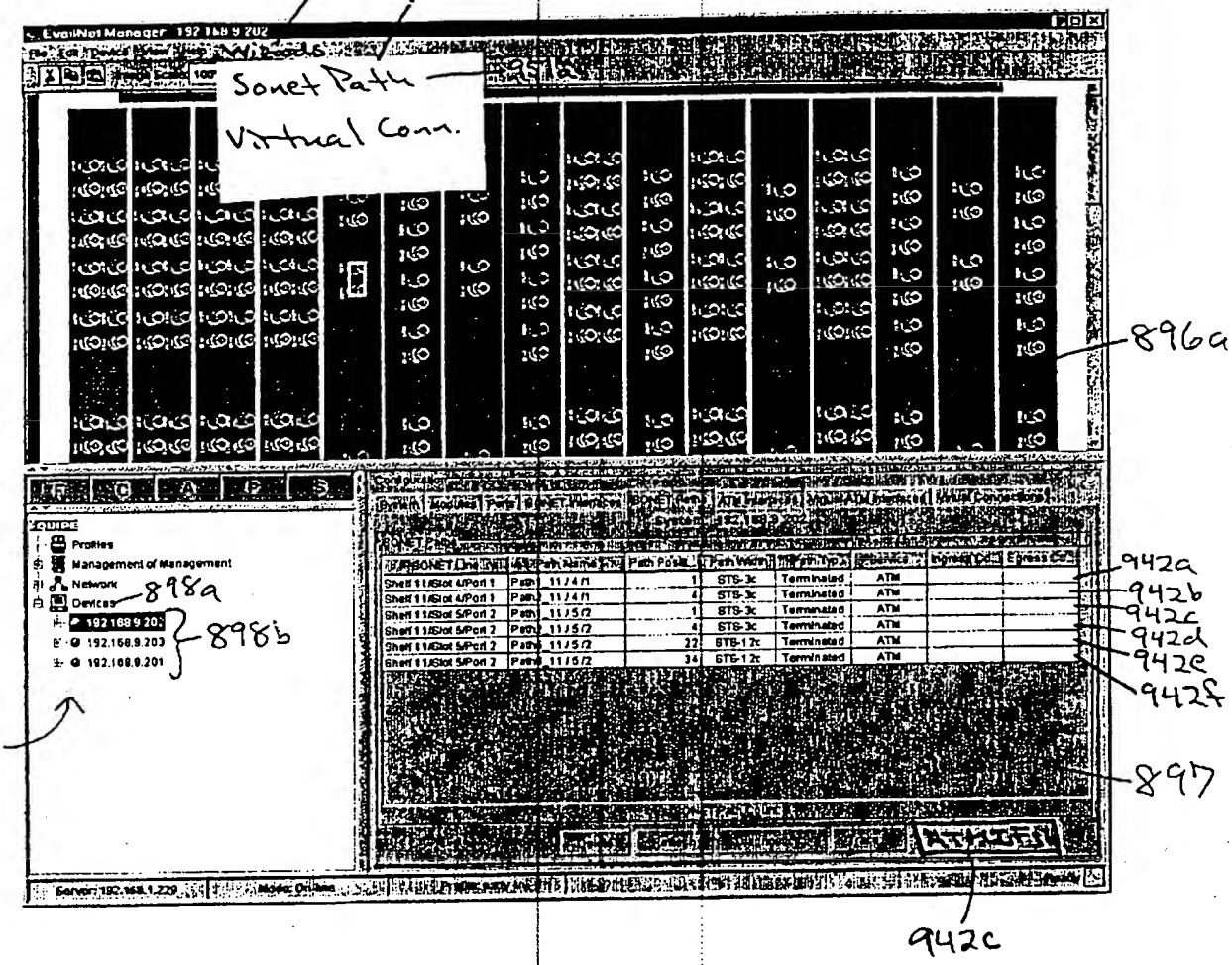


Fig 5g

DOCKET ALARM

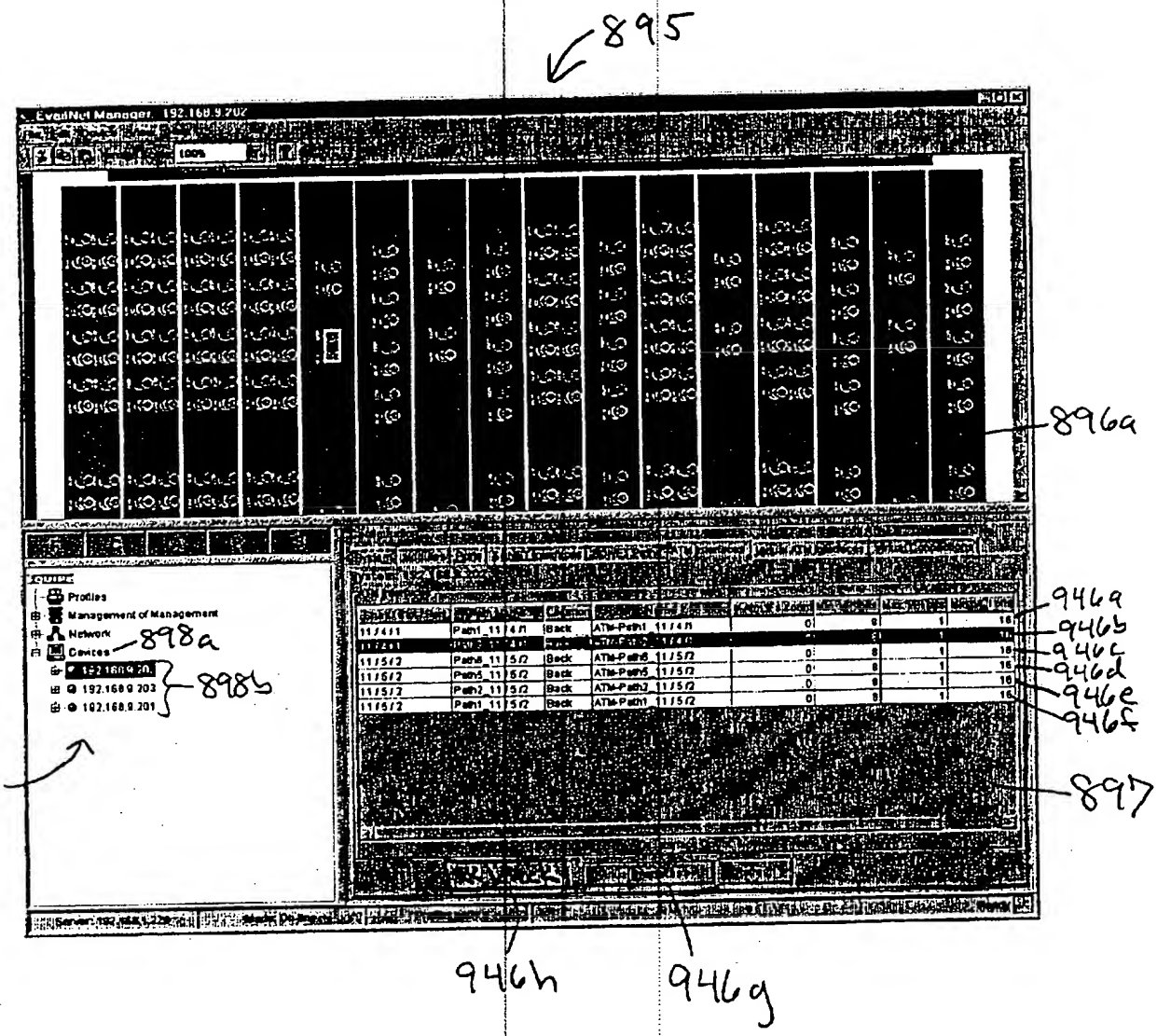

895
896a
946a
946b
946c
946d
946e
946f
898
898a
898b
897
946h
946g

Fig. 5F

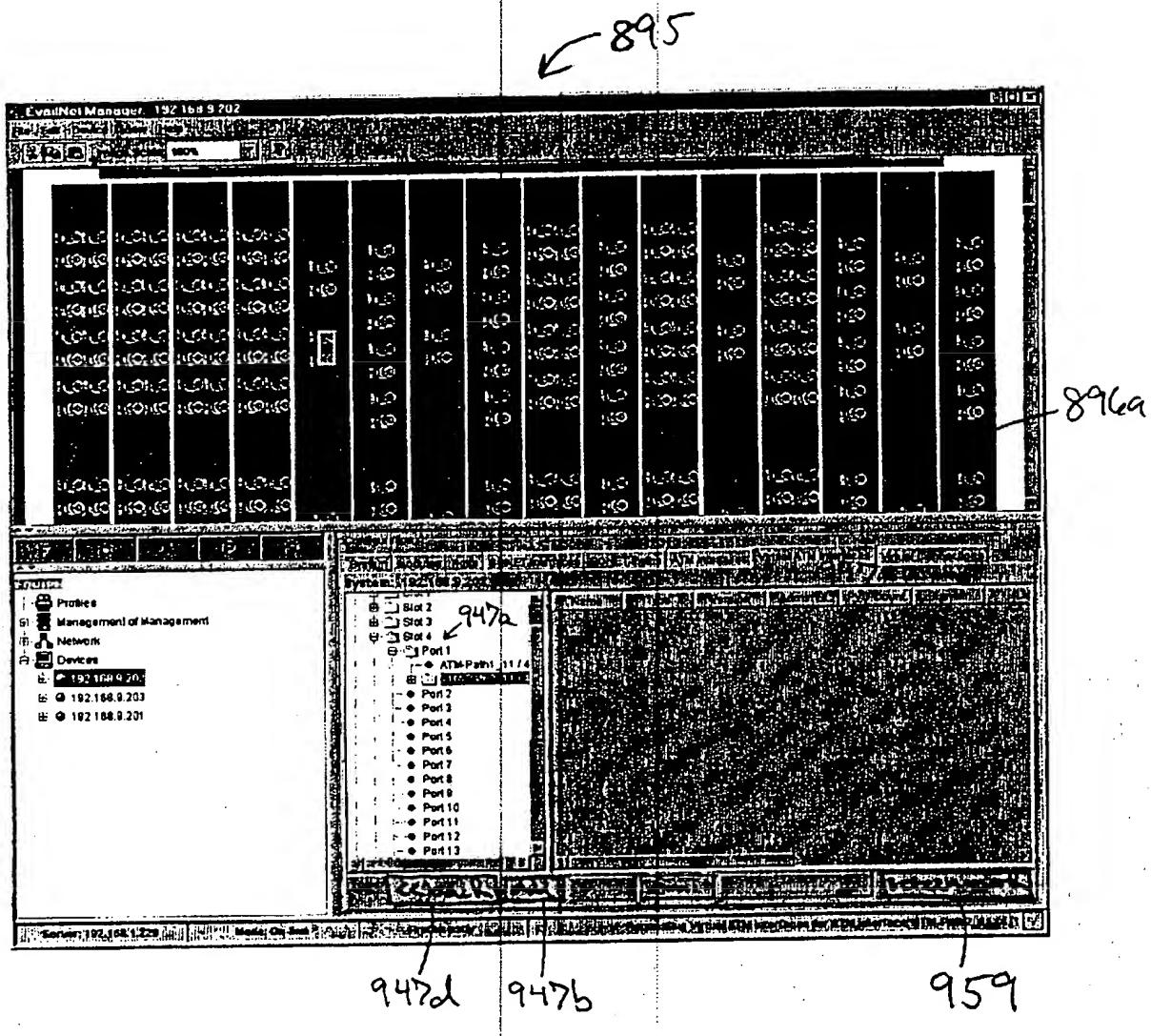
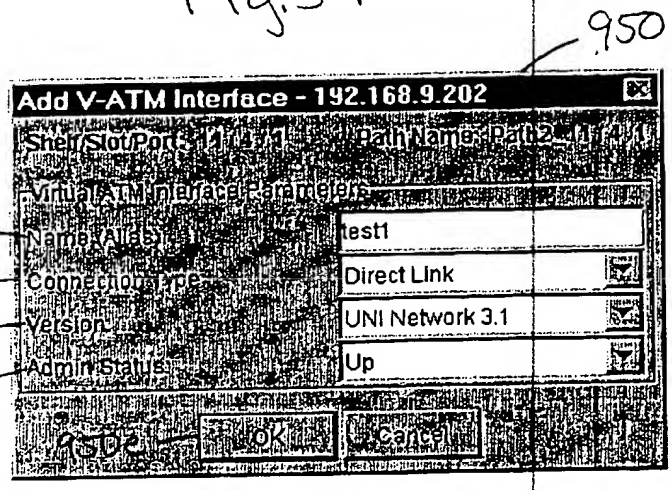


Fig. 5s

DOCKET ALARM

Fig. 5t


950
Add V-ATM Interface - 192.168.9.202
Shelf/Slot/Port: 1 / 1 / 1
Path Name: Path2
Virtual ATM Interface Parameters
950d
Name (Alias)
test1
950a
Connection Type
Direct Link
950b
Version
UNI Network 3.1
950c
Admin Status
Up
952
OK
Cancel

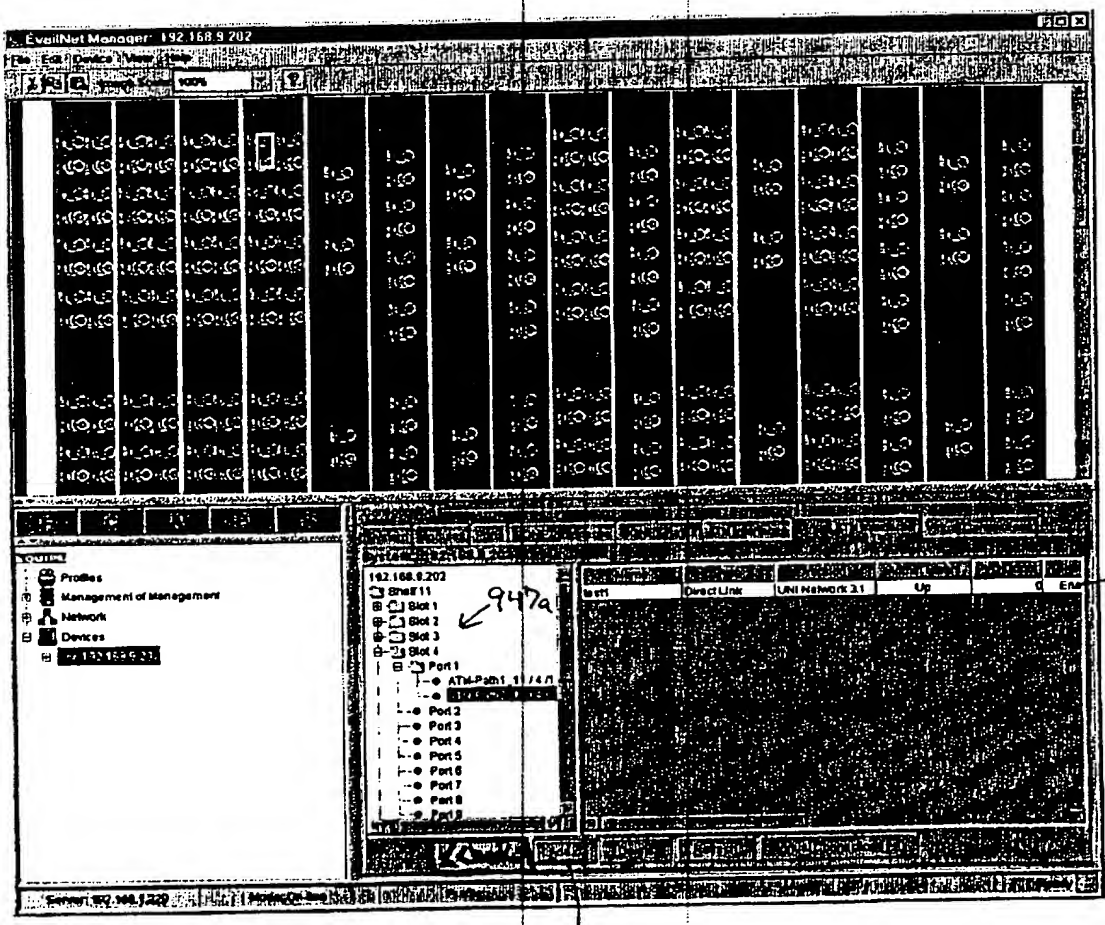

EverNet Manager: 192.168.9.202
947a
947c
947b

Fig. 5u

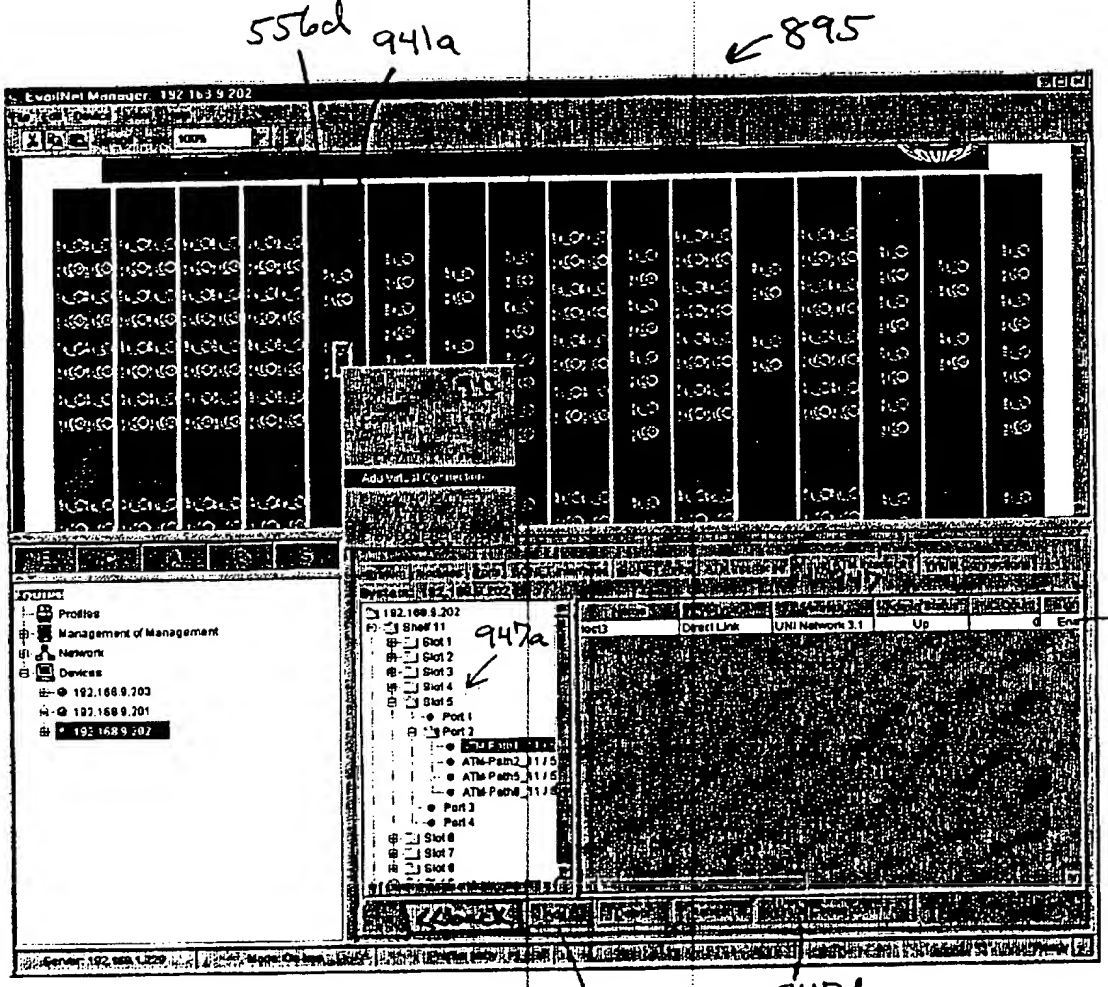


Fig. 5v

DOCSOC-V1\65950.0

952

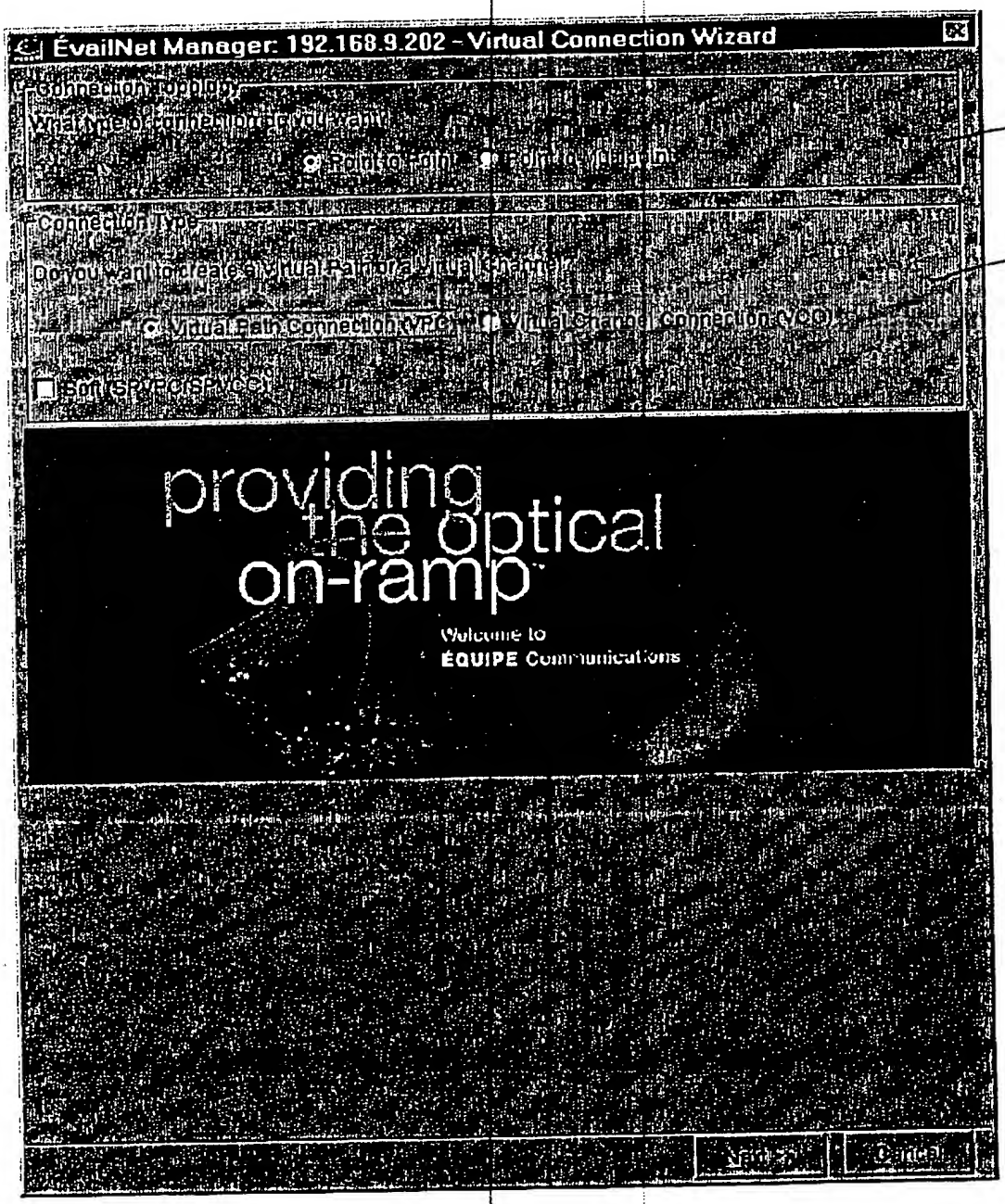

EvailNet Manager: 192.168.9.202 - Virtual Connection Wizard
952a
952b
providing the optical on-ramp
Welcome to
EQUIPE Communications

Fig. 5w

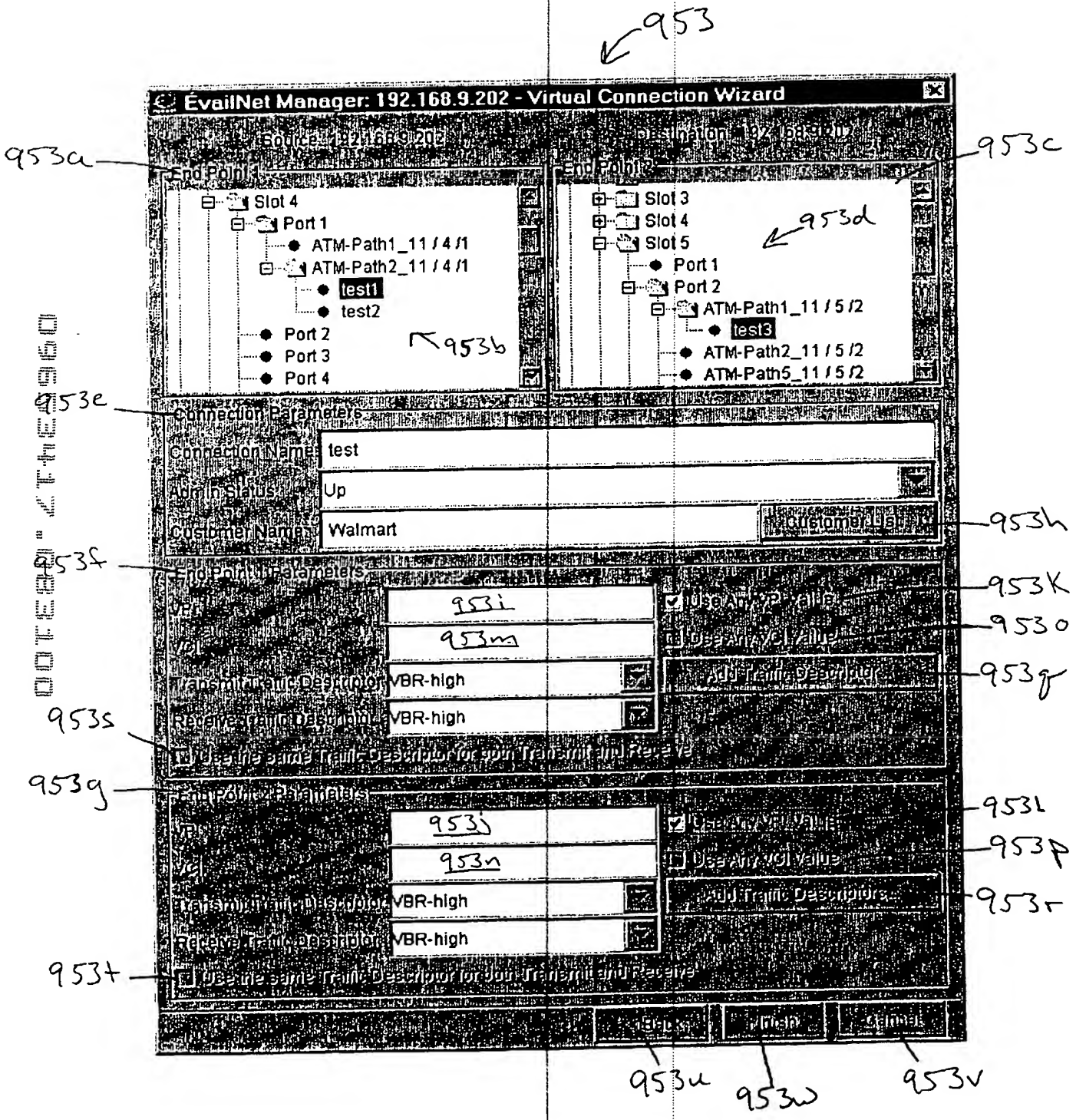

953
EvailNet Manager: 192.168.9.202 - Virtual Connection Wizard
953a
End Point 1
Slot 4
Port 1
ATM-Path1_11 / 4 /1
ATM-Path2_11 / 4 /1
test1
test2
Port 2
Port 3
Port 4
953b
953c
End Point 2
Slot 3
Slot 4
Slot 5
953d
Port 1
Port 2
ATM-Path1_11 / 5 /2
test3
ATM-Path2_11 / 5 /2
ATM-Path5_11 / 5 /2
953e
Connection Parameters
Connection Name
test
Admin Status
Up
Customer Name
Walmart
Customer Params
953h
953f
End Point Parameters
VPI
953i
VCI
953m
Transmit Traffic Descriptor
VBR-high
Receive Traffic Descriptor
VBR-high
953K
Use Any VPI value
953o
Use Any VCI value
Add Traffic Descriptor
953g
953s
Use the same Traffic Descriptor for both Transmit and Receive
953g
End Point Parameters
VPI
953j
VCI
953n
Transmit Traffic Descriptor
VBR-high
Receive Traffic Descriptor
VBR-high
953l
Use Any VPI value
953p
Use Any VCI value
Add Traffic Descriptors
953r
953t
Use the same Traffic Descriptor for both Transmit and Receive
Back
Next
Cancel
953u
953w
953v

Fig. 5x

09534760.1 090803

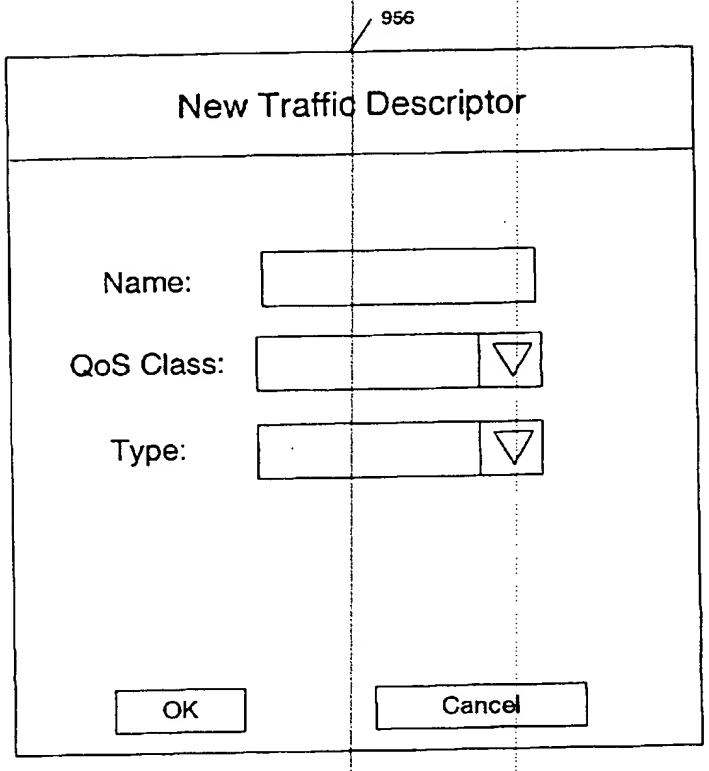


Fig. 5Y

08/29/2001 WED 13:29 [TX/RX NO 6150]

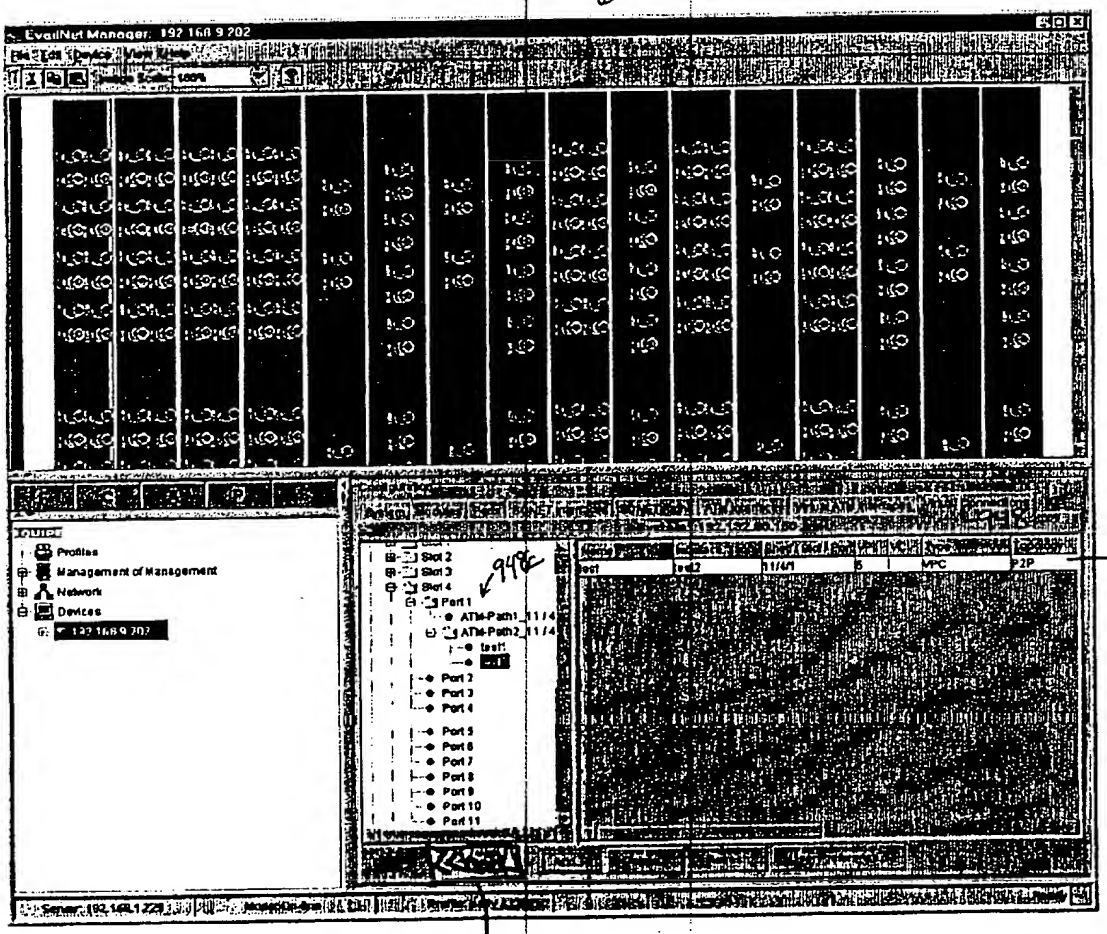


Fig. 57

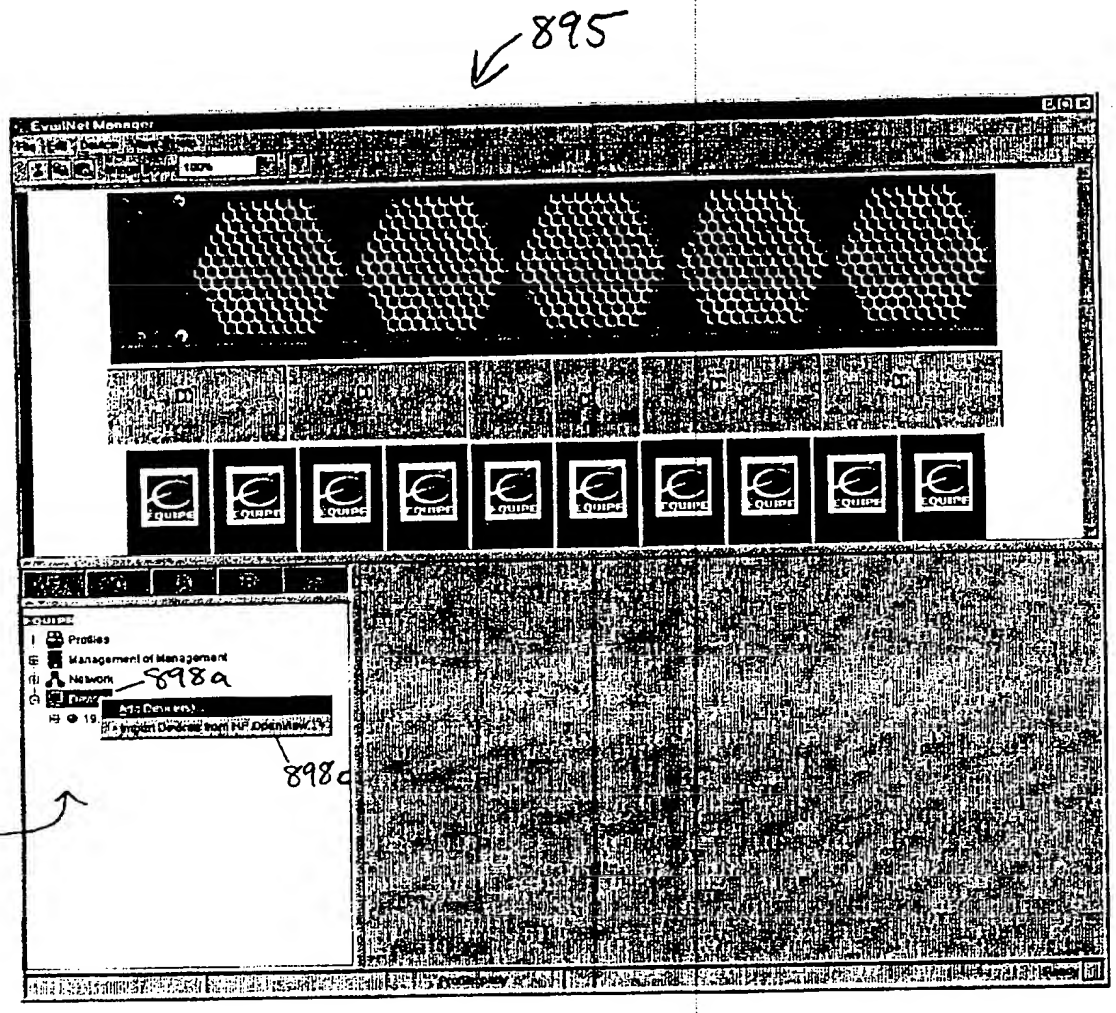


Fig. 6a

09653400 - 082900

Fig. 6b

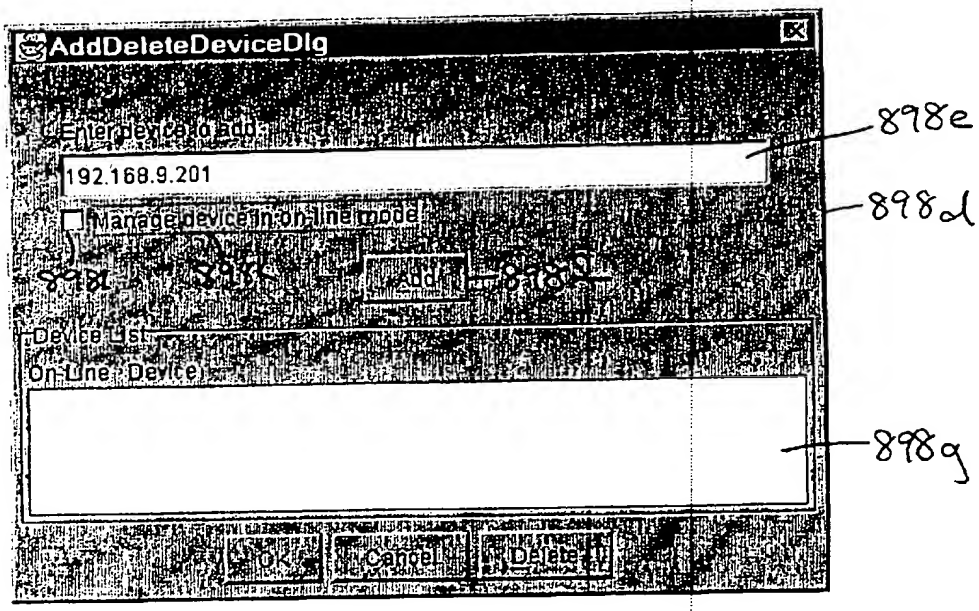
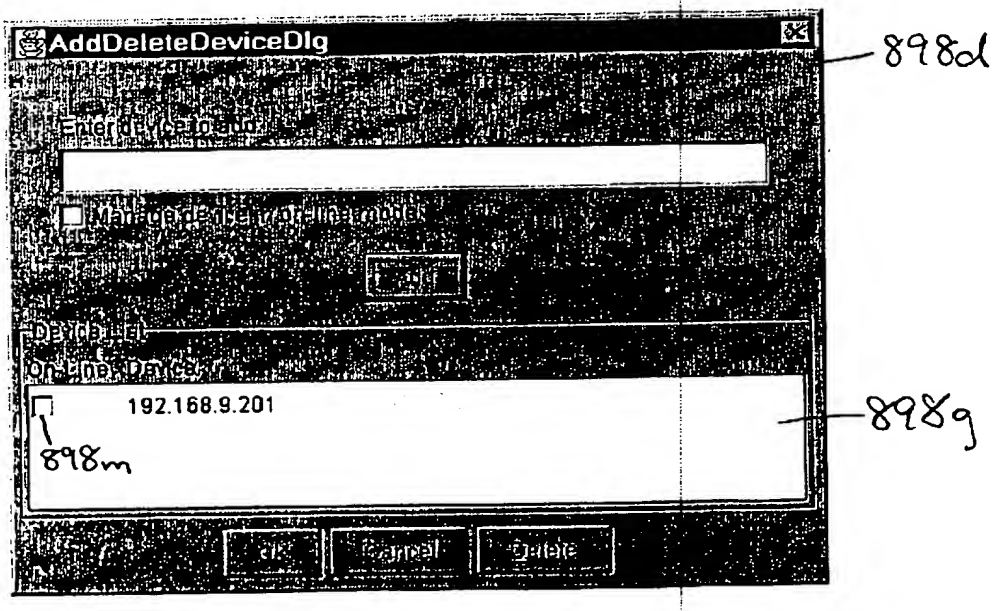


Fig. 6c



0025947 05/30/03

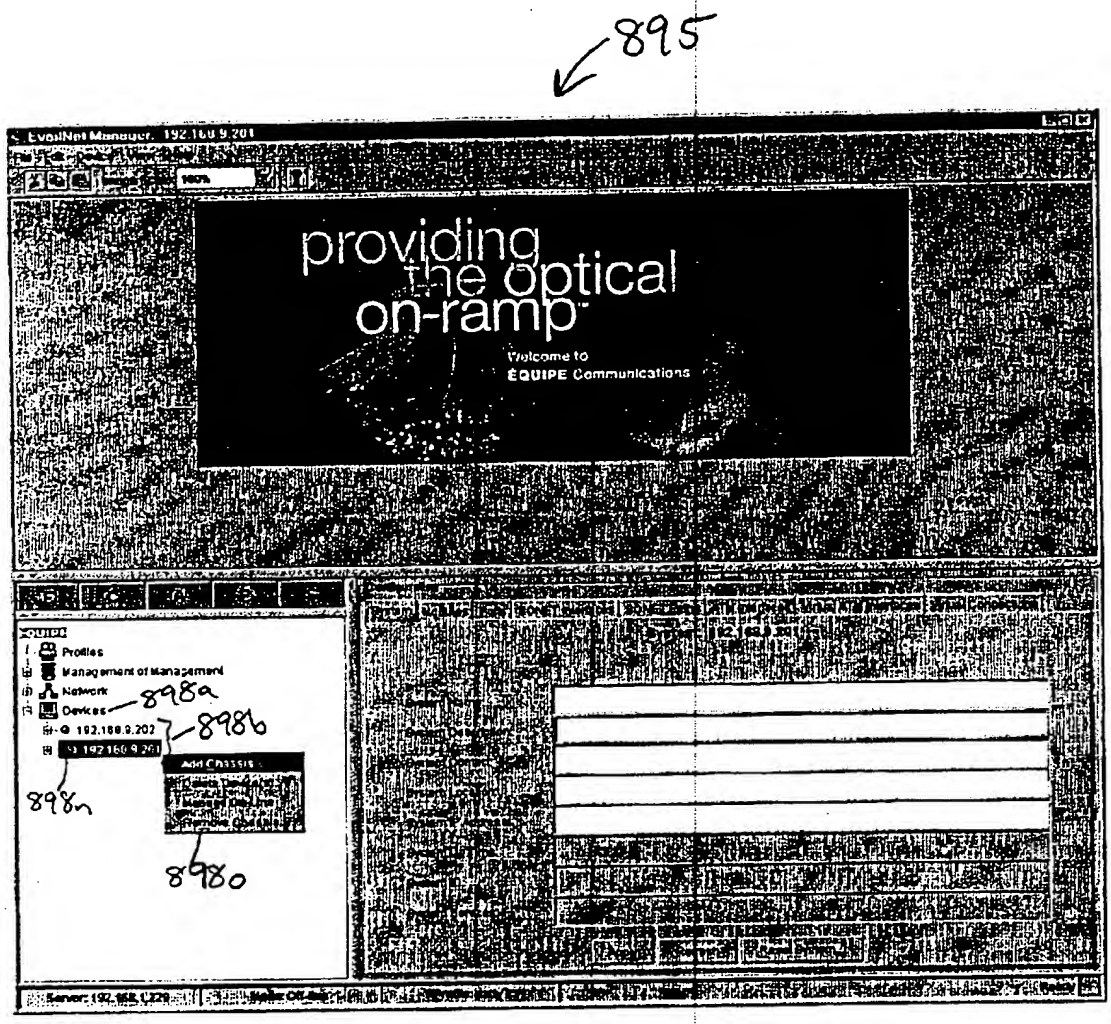


Fig. 6d

09754960 - 082900

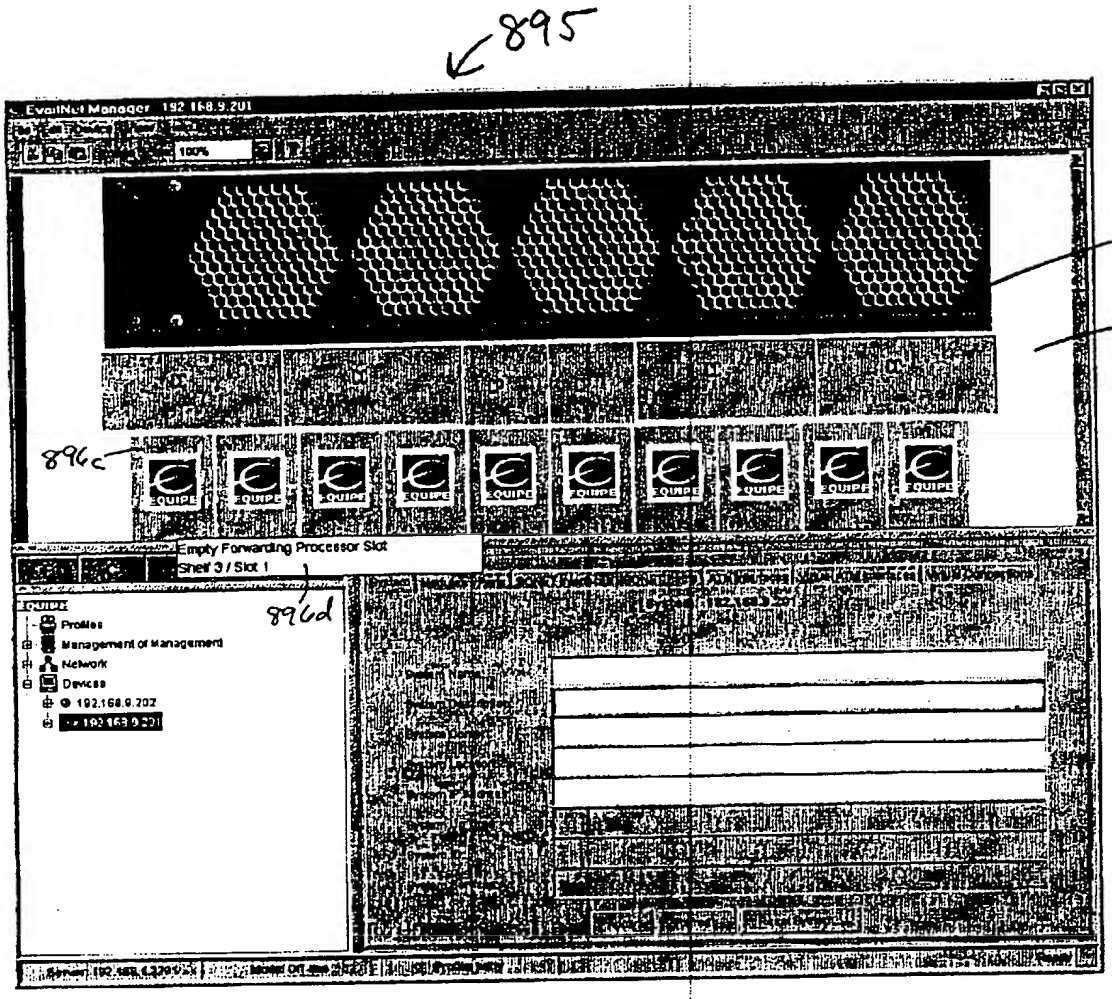


Fig. 6e

09529.1400.NP1

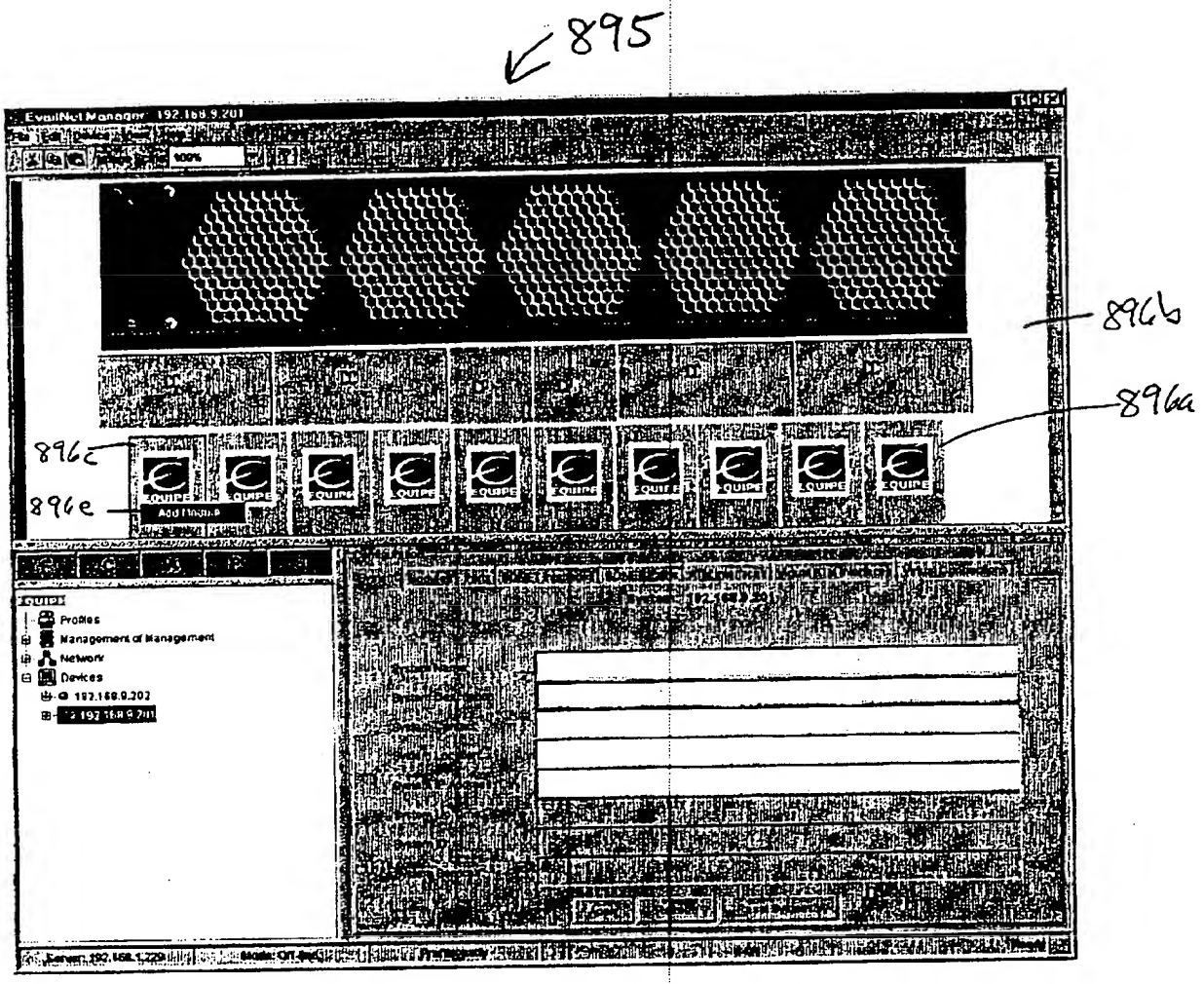


Fig. 6f

09/29/04, EAST Version: 1.4.1

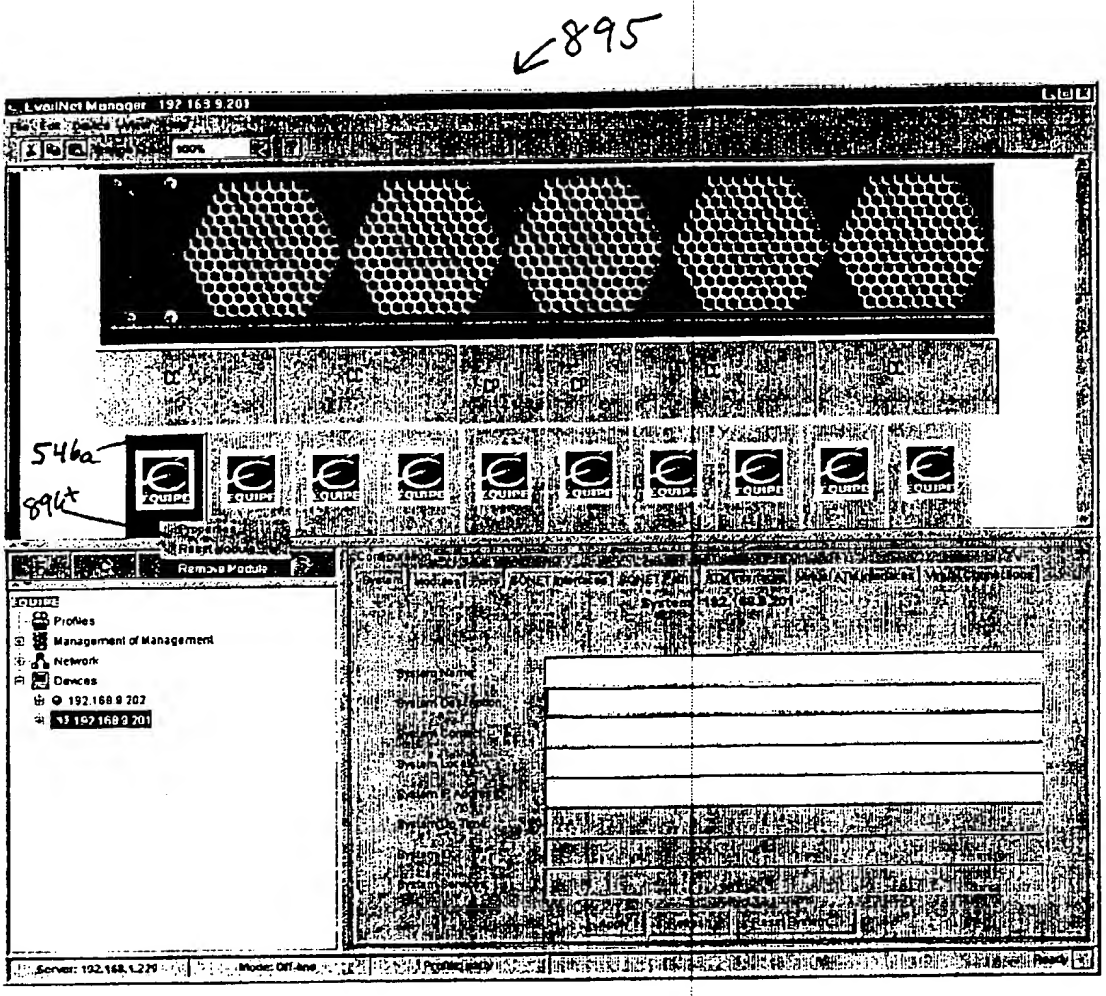


Fig. 6g

0054804.7 45550

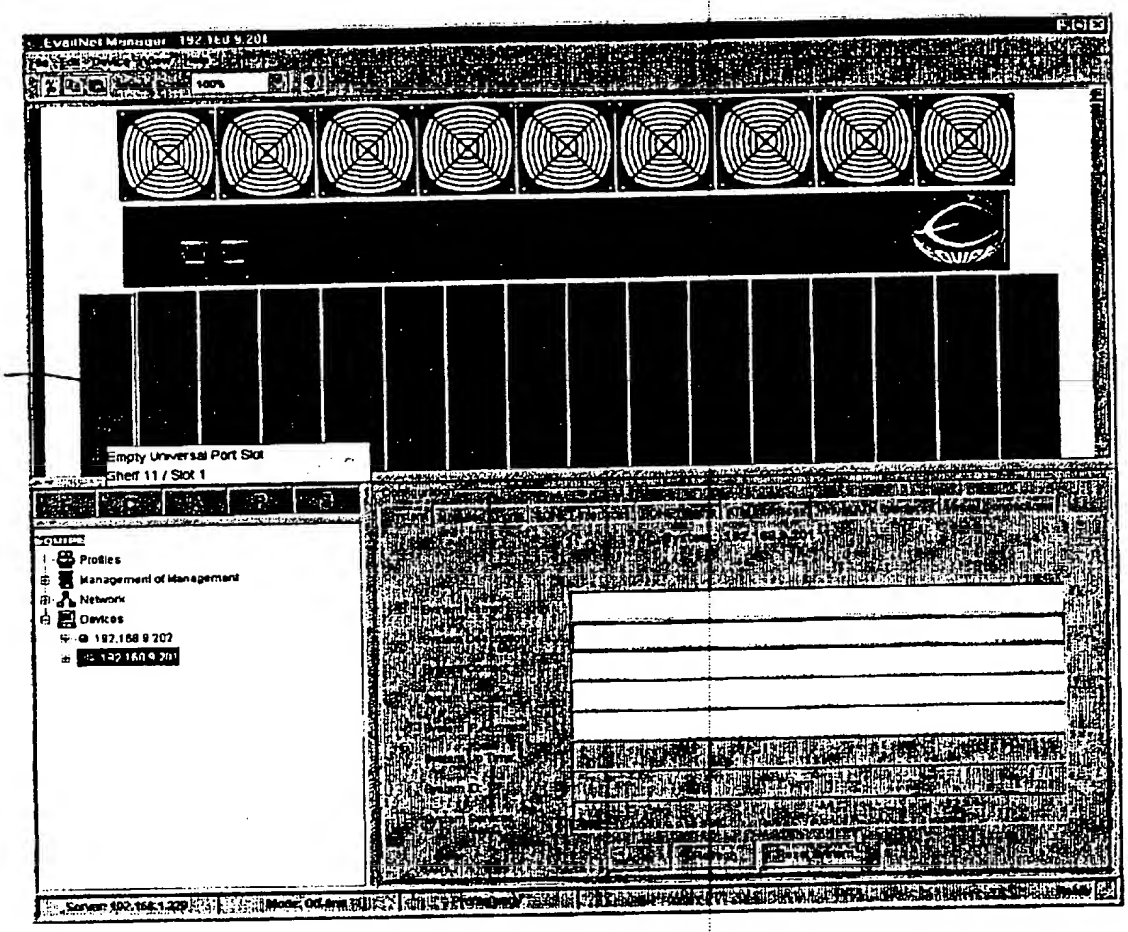


Fig. 6h

0075-4795-0800

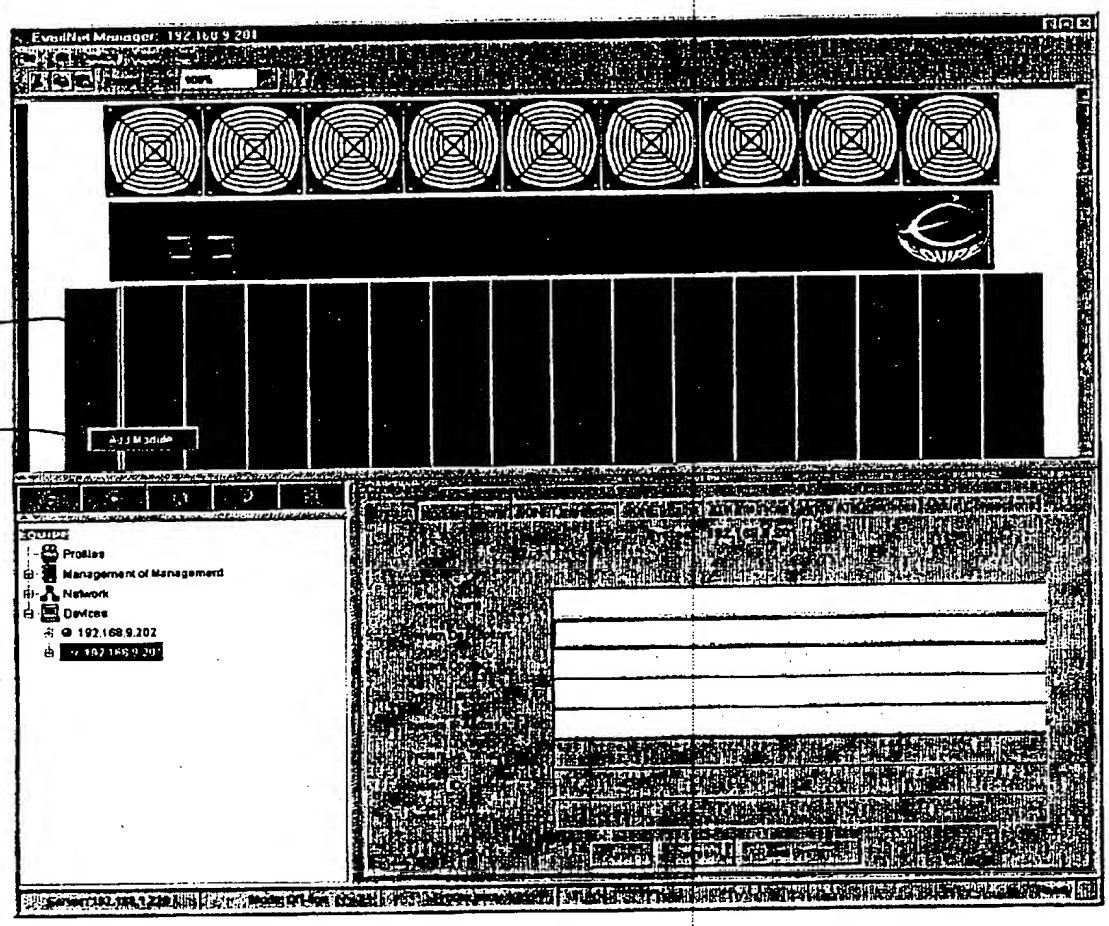
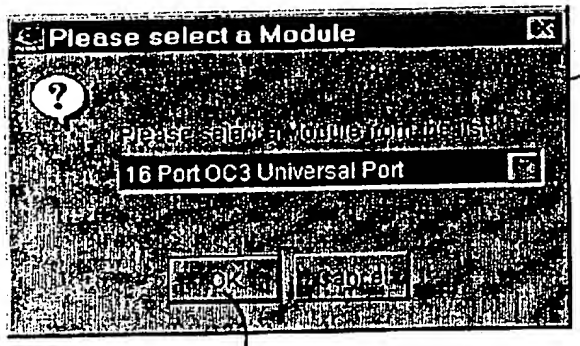


Fig. 6i

09/29/2006 15:45 #0950 P.009

Fig. 6J



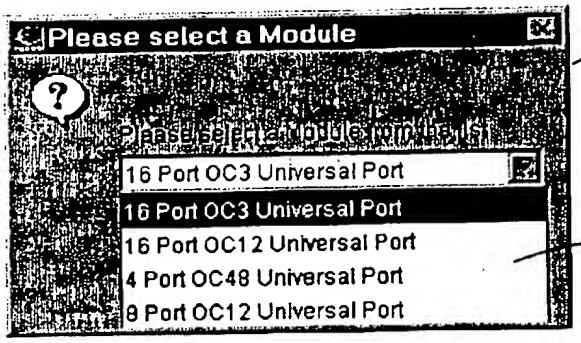


Fig. 6K

09654747.080300

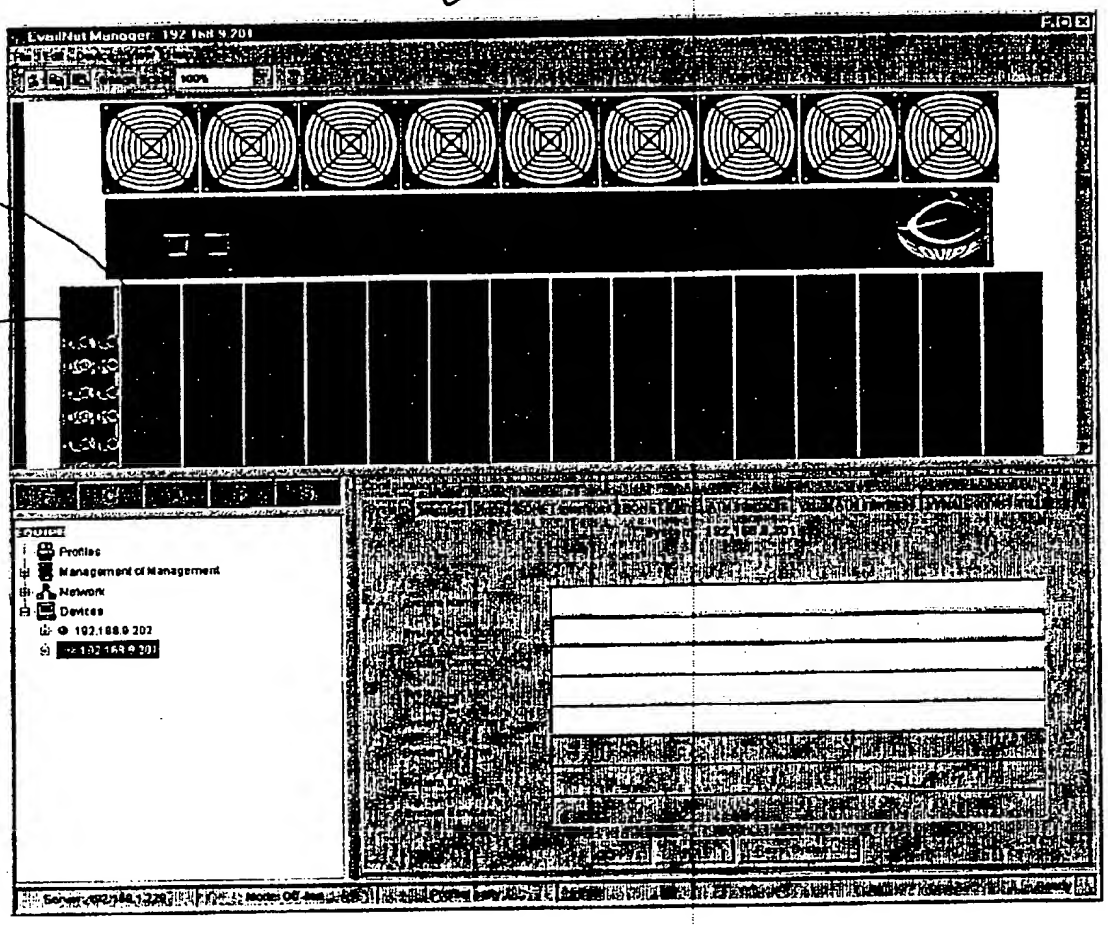


Fig. 6L

DOCKET NO. 50

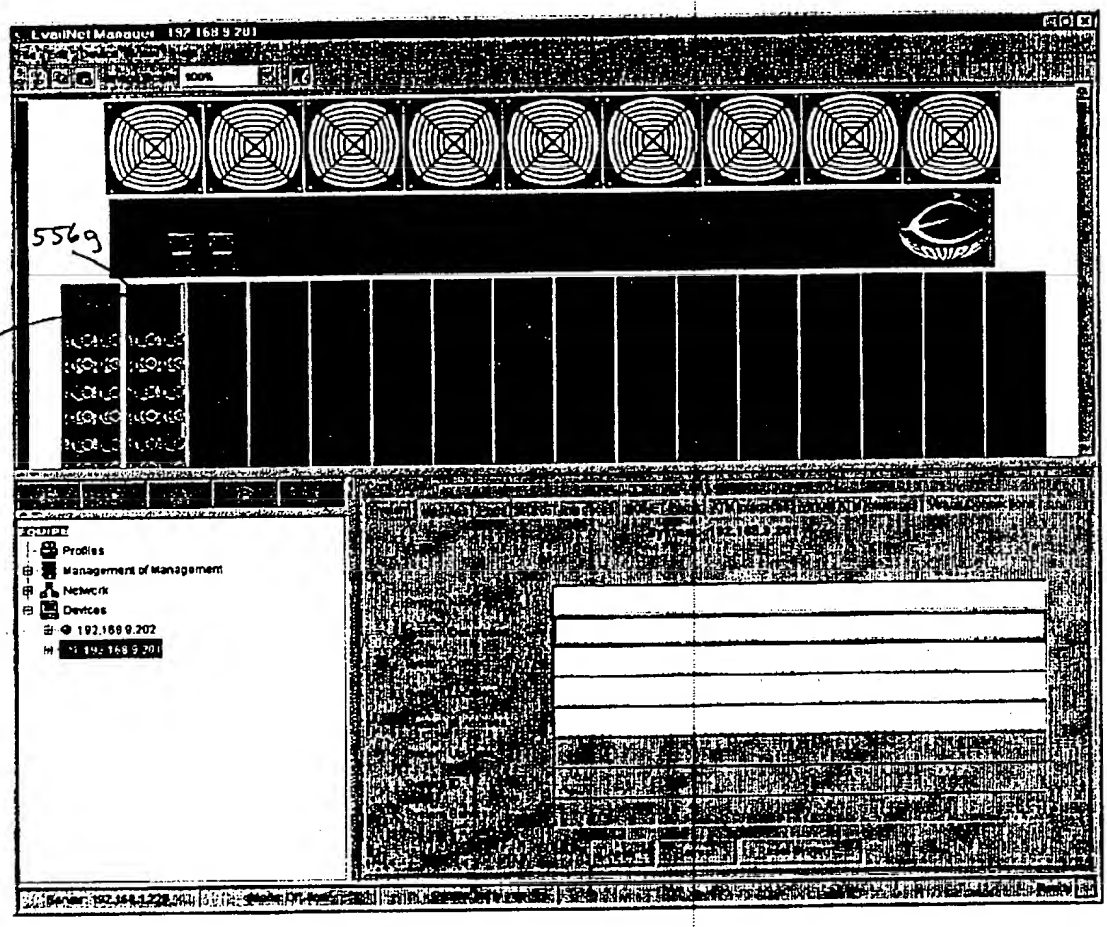


Fig 6m

DOCKET ALARM

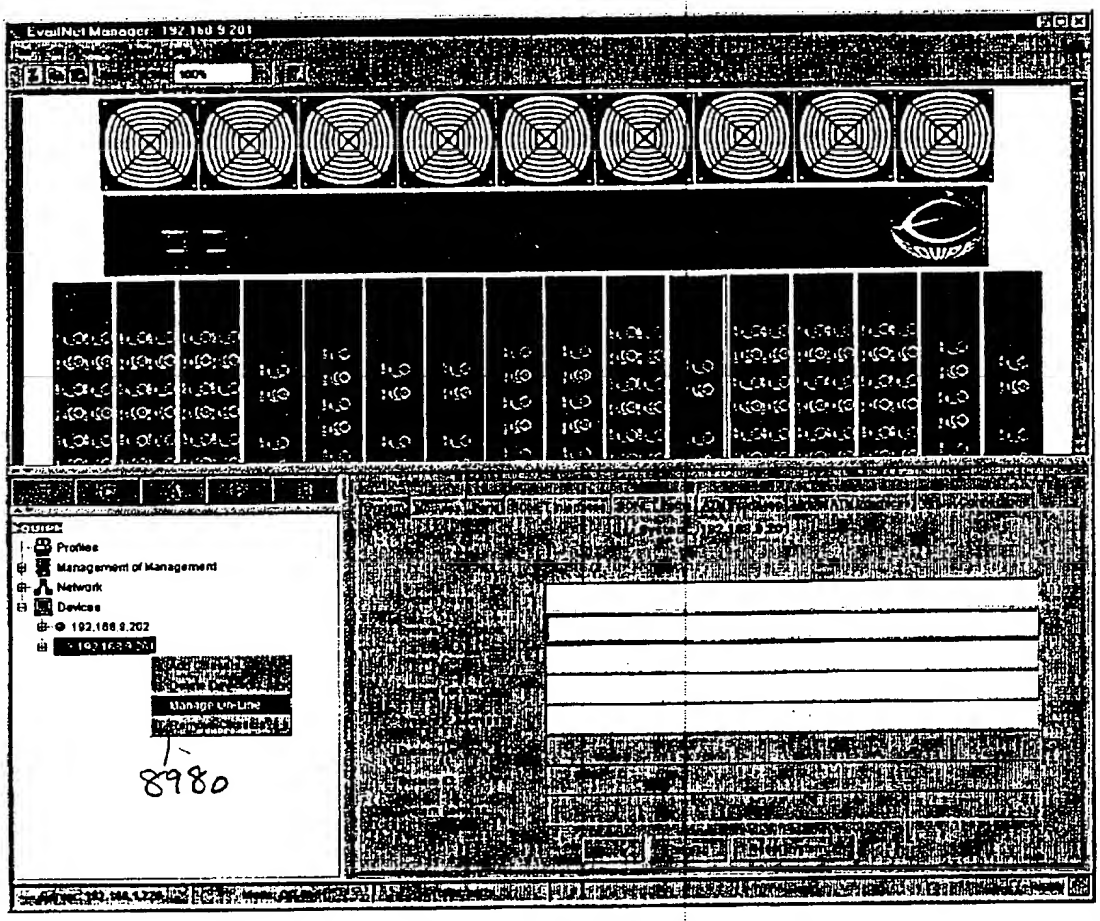


Fig. 6n

DOCKET ALARM

895

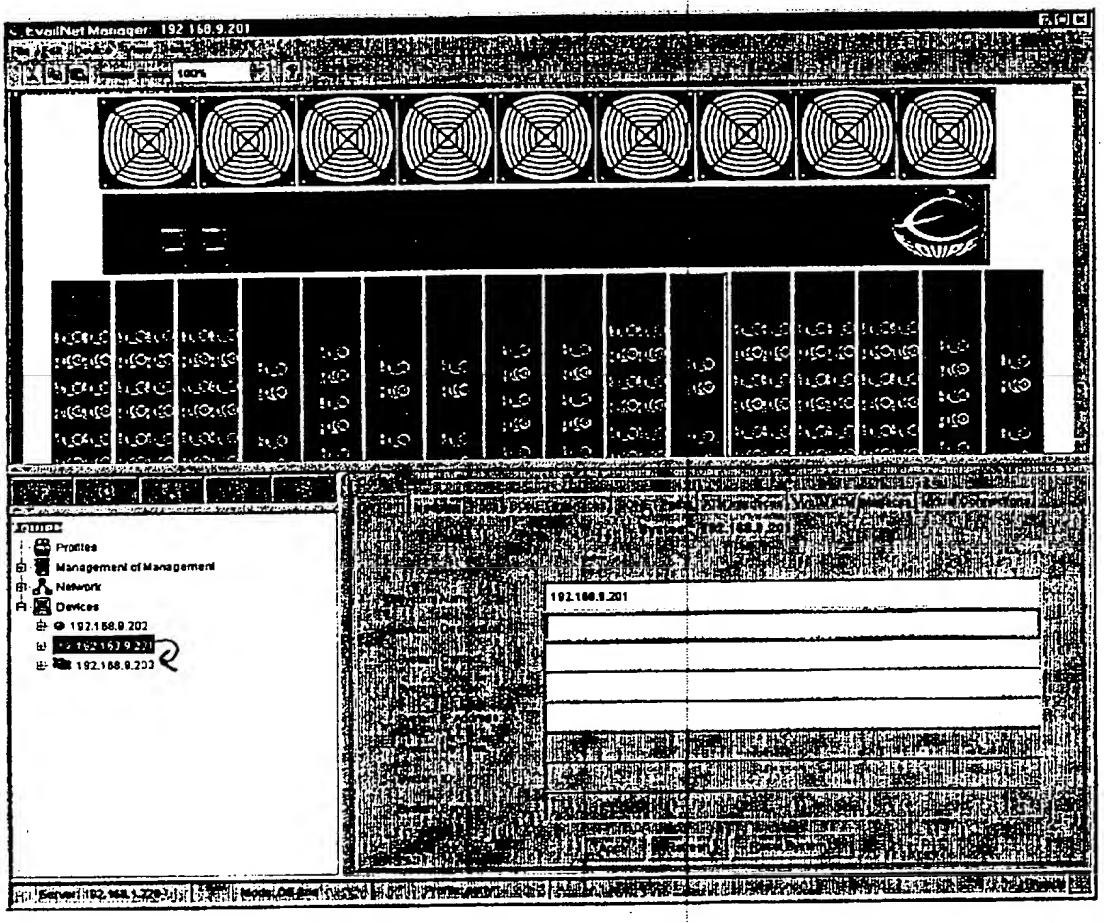


Fig. 60

08/29/00 - 12:52:50

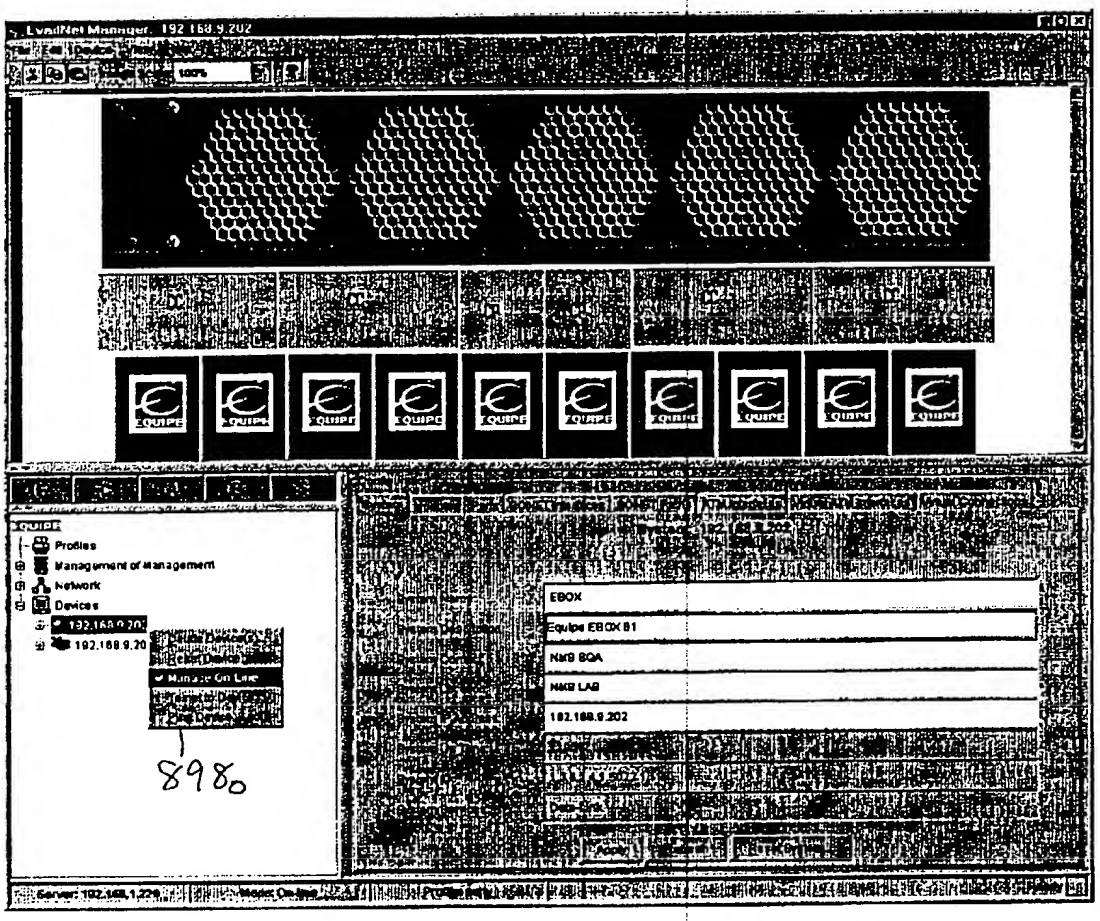


Fig. 6P

DOCKET ALARM

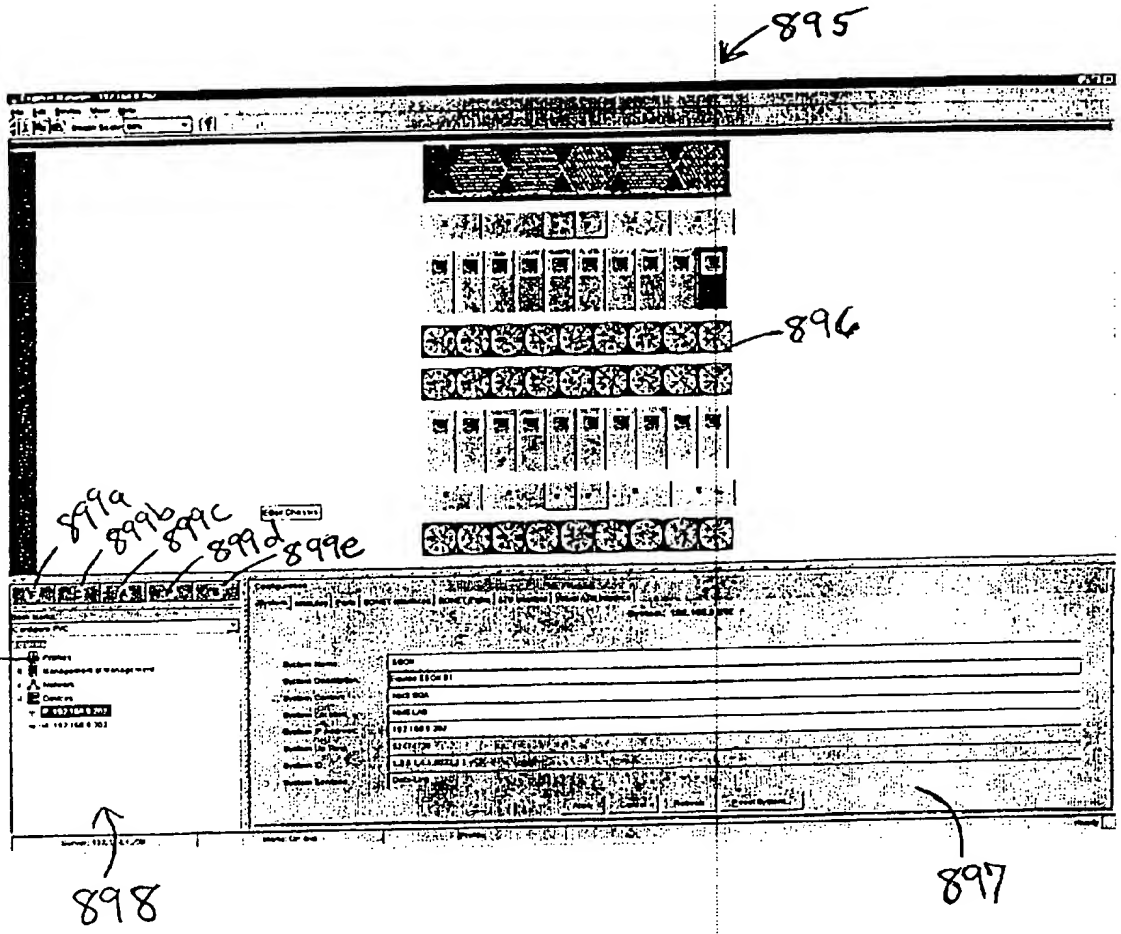


Fig. 7a

DOCKET: 7435.0

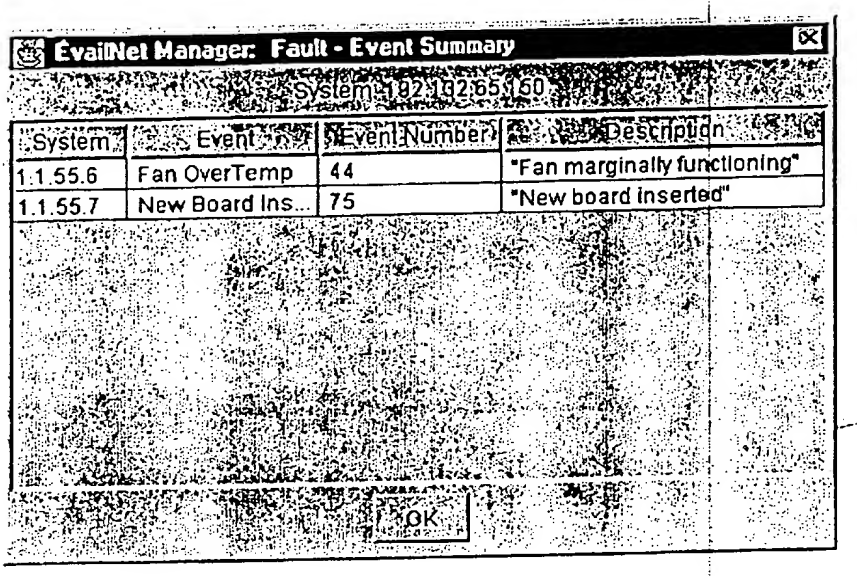


Fig. 7b

DOCKET ALARM

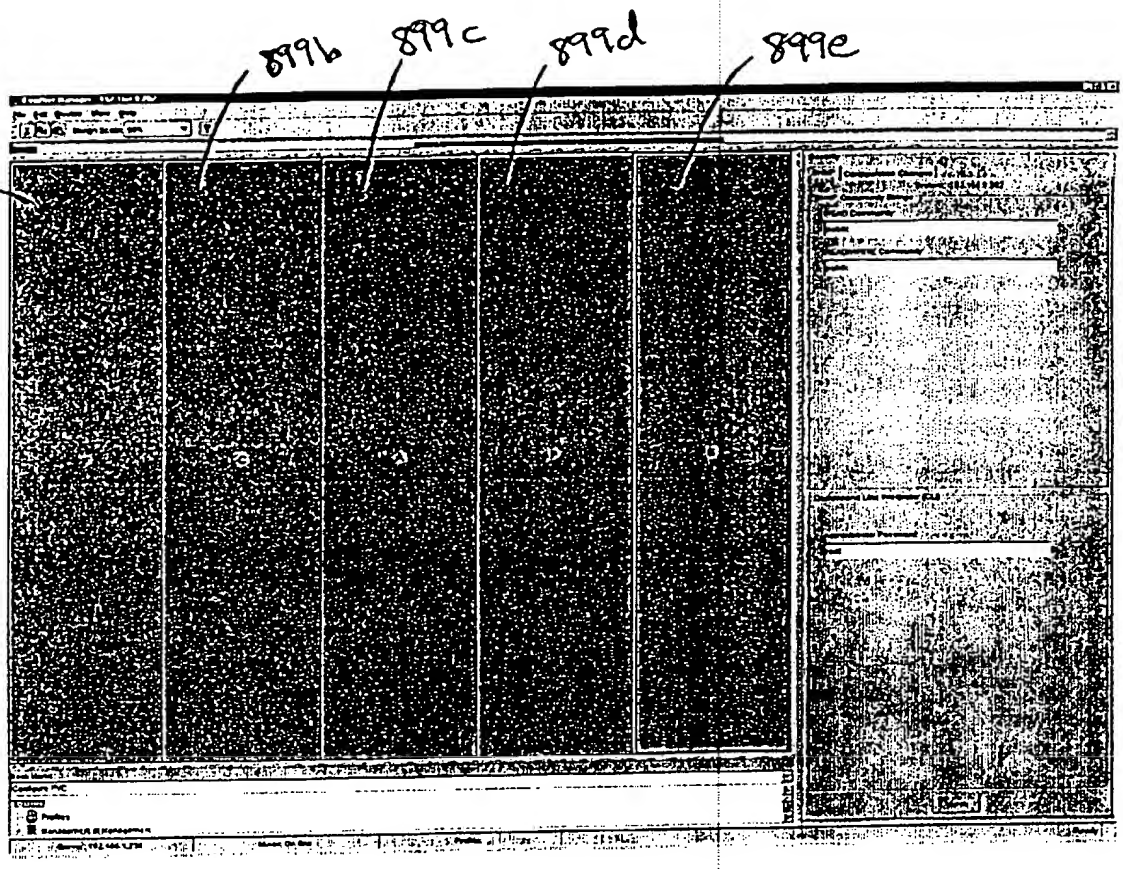


Fig.7c

09534700 - 082900

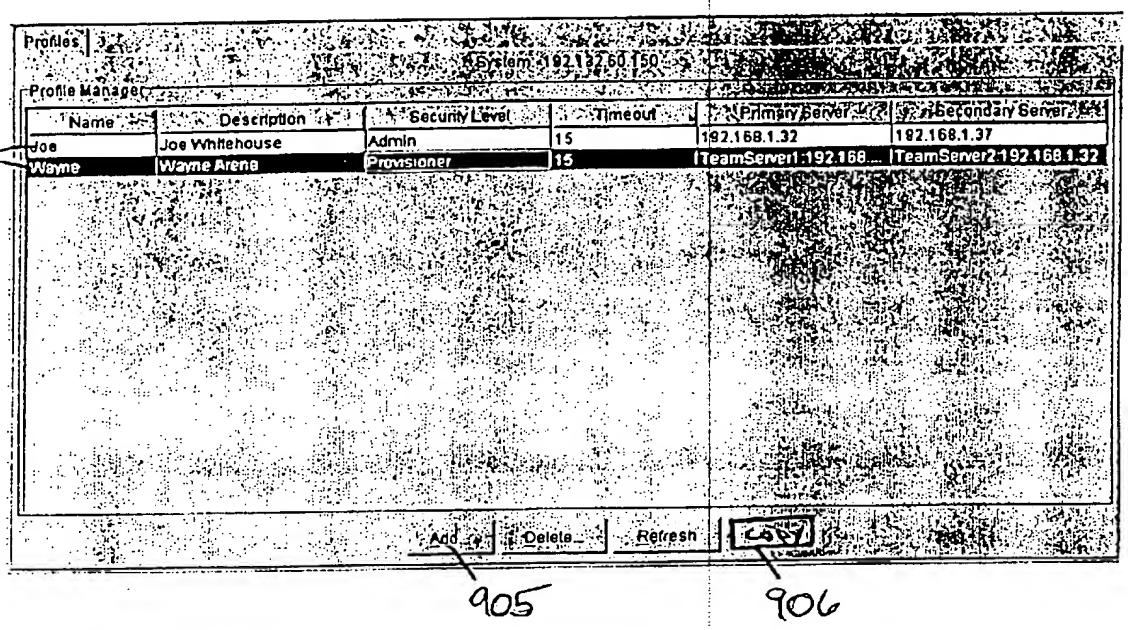


Fig. 7d

DOCKET A L A R M

Fig. 7e

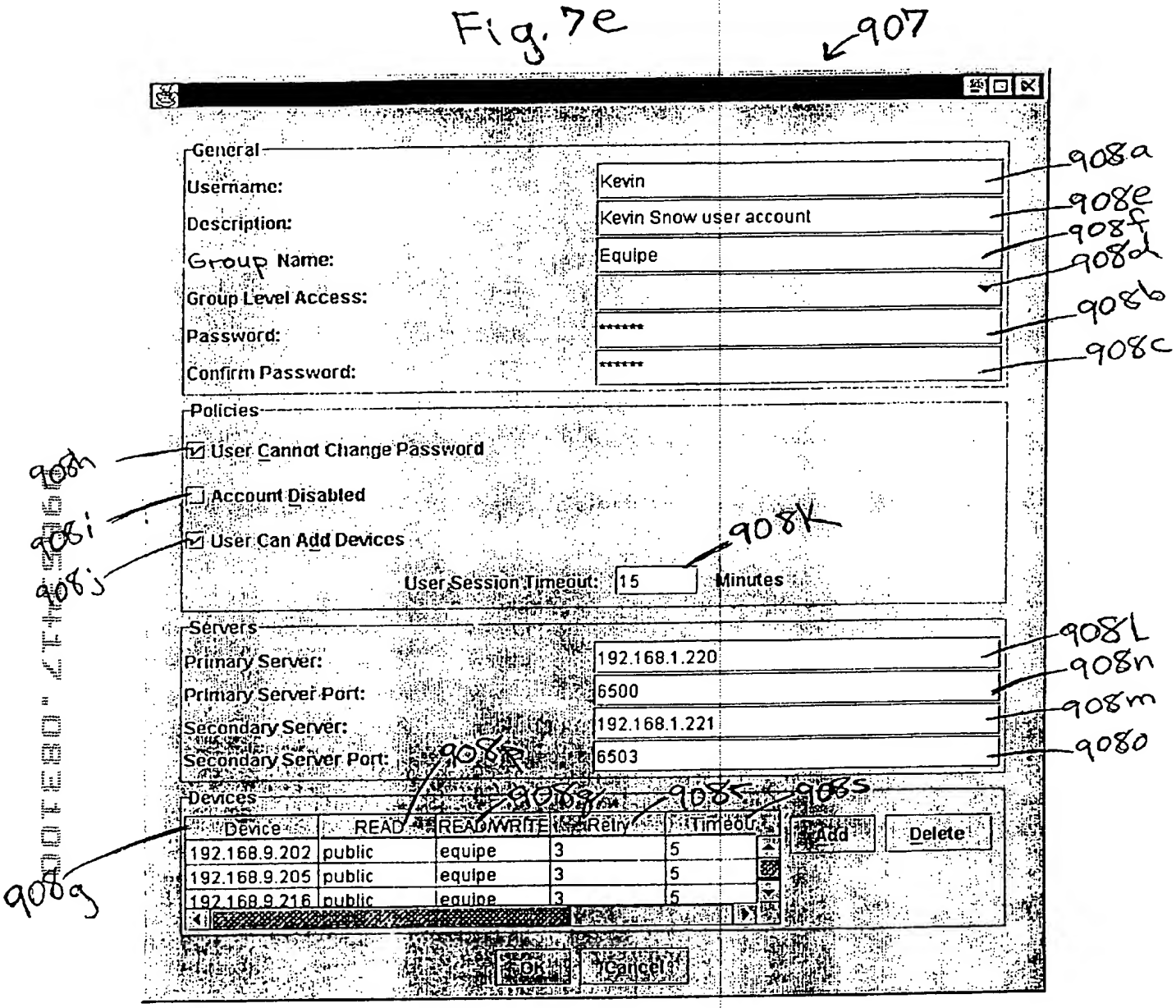
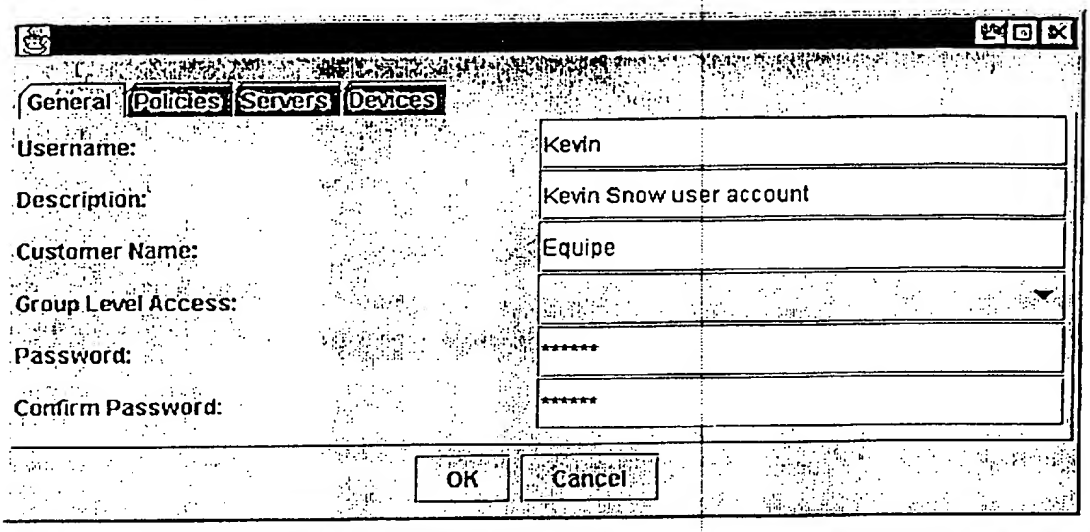

907
General
Username:
Kevin
908a
Description:
Kevin Snow user account
908e
Group Name:
Equipe
908f
Group Level Access:
908d
Password:
******
908b
Confirm Password:
******
908c
Policies
User Cannot Change Password
908h
Account Disabled
908i
User Can Add Devices
908j
User Session Timeout:
15
Minutes
908k
Servers
Primary Server:
192.168.1.220
908l
Primary Server Port:
6500
908n
Secondary Server:
192.168.1.221
908m
Secondary Server Port:
6503
908o
Devices
908g
908p
908q
908r
908s
908t
Device
READ
READ/WRITE
Retry
Timeout
192.168.9.202
public
equipe
3
5
192.168.9.205
public
equipe
3
5
192.168.9.216
public
equipe
3
5
Add
Delete
OK
Cancel

Fig. 7f



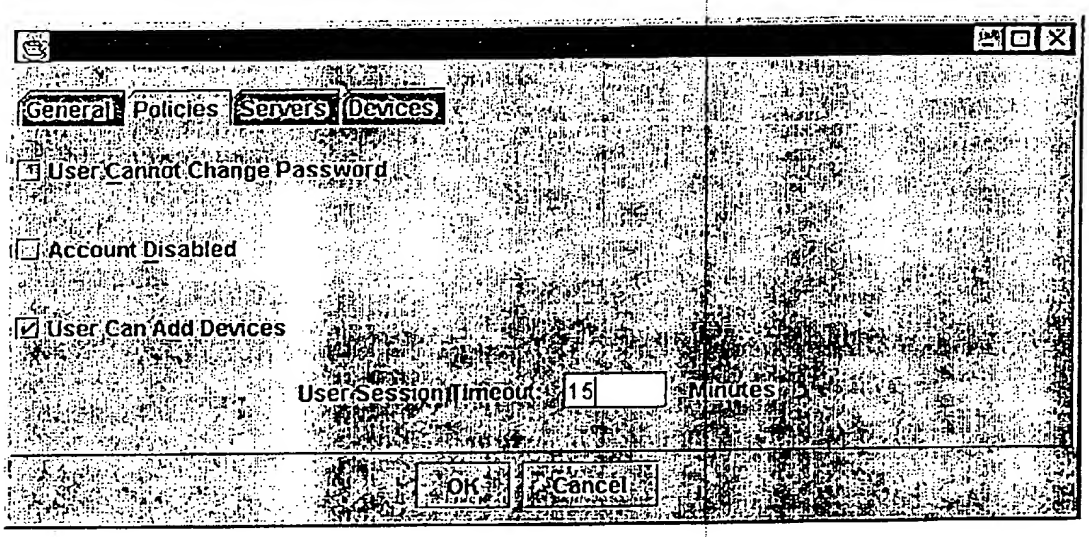
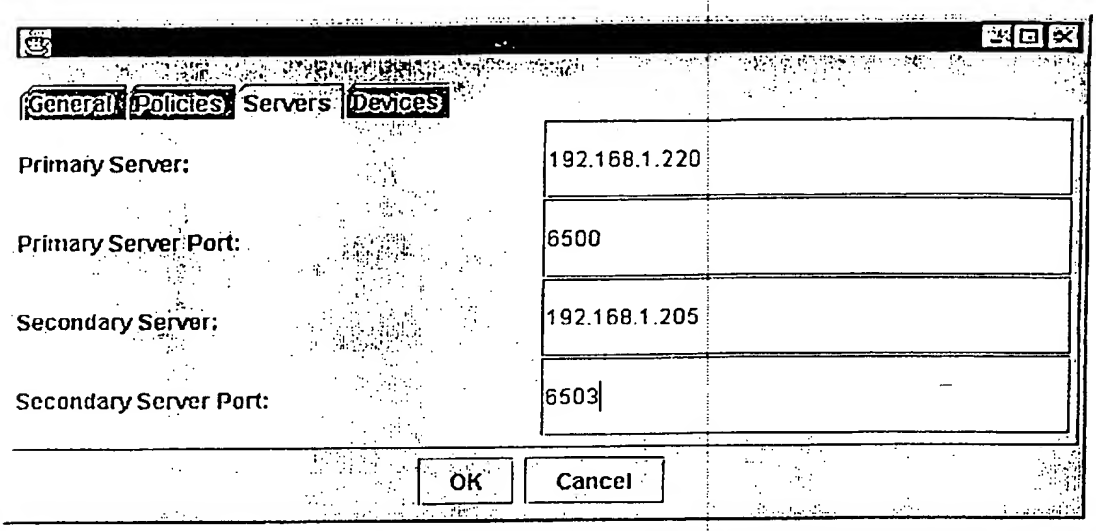


Fig. 7g

0054447.0003

Fig. 7h



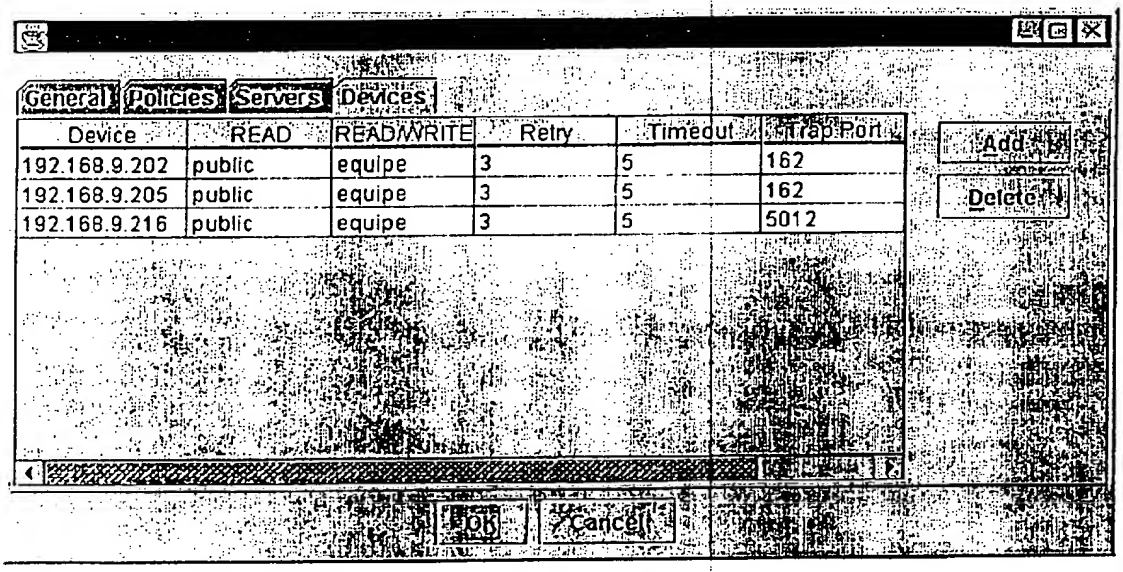


Fig. 7i

DOCKET ALARM

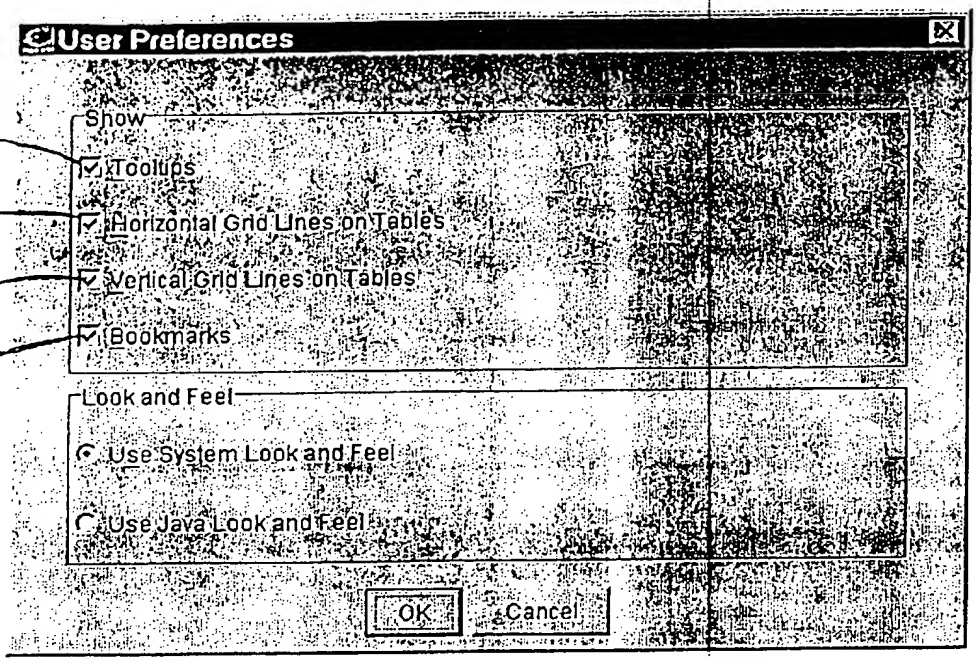
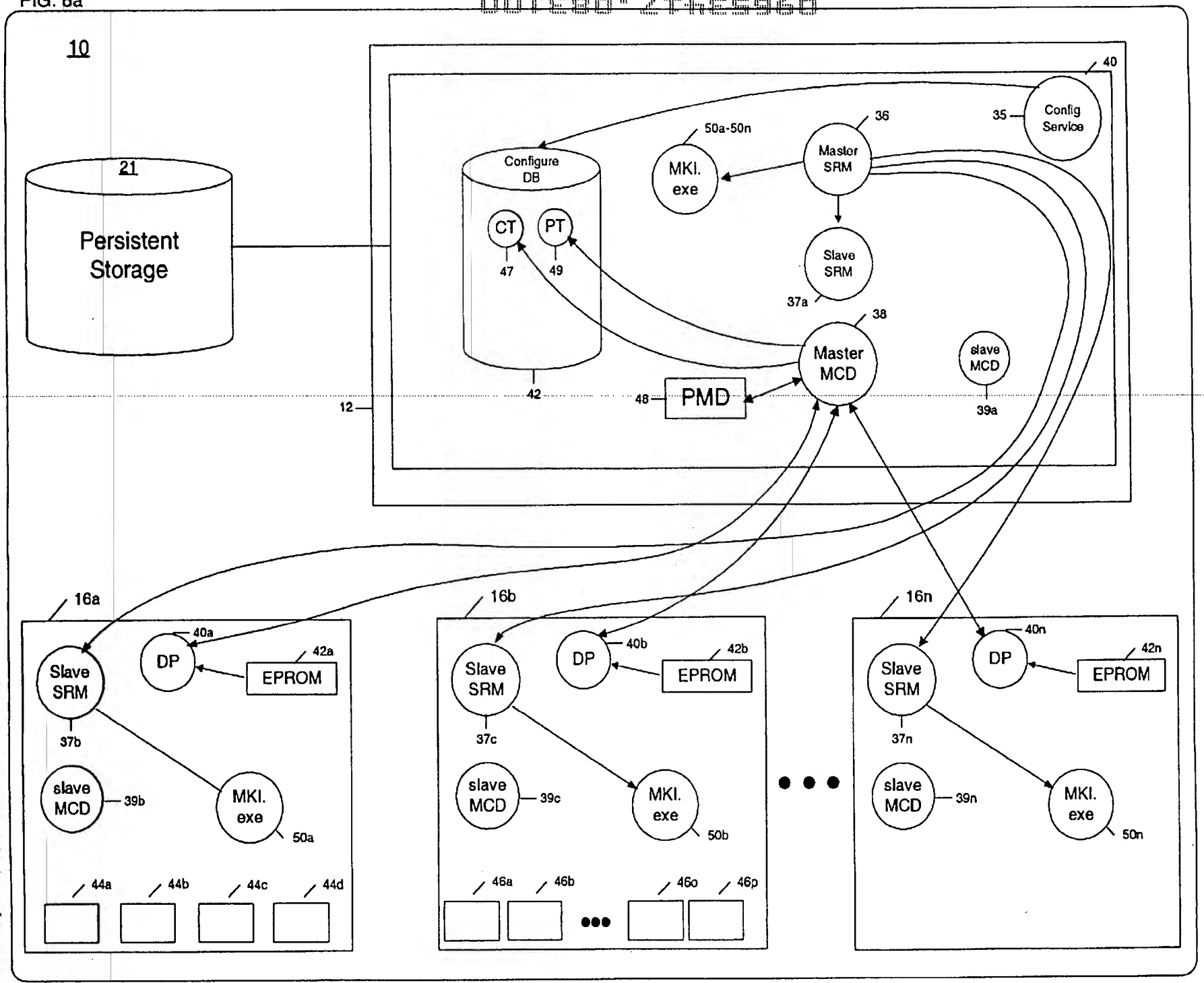


Fig. 7j

DOCKET NO. 3454.0050

FIG. 8a


10
40
Config Service
35
36
Master SRM
50a-50n
MKI. exe
Configure DB
CT
PT
47
49
Slave SRM
37a
21
Persistent Storage
38
Master MCD
slave MCD
39a
42
48
PMD
12
16a
16b
16n
Slave SRM
37b
DP
40a
EPROM
42a
slave MCD
39b
MKI. exe
50a
44a
44b
44c
44d
Slave SRM
37c
DP
40b
EPROM
42b
slave MCD
39c
MKI. exe
50b
46a
46b
46o
46p
Slave SRM
37n
DP
40n
EPROM
42n
slave MCD
39n
MKI. exe
50n

Sent By: Equipe Communications; 781 795 2031; Aug-29-00 2:08PM; Page 3

CARD TABLE

47

	PID	CWD TYPE	VERSION NO.	SLOT NO.	...
16 a	500	0XF002	3	1	
16 b	501	0XF002	4	2	
	⋮	⋮	⋮	⋮	⋮
16e	505	0X6002	1	5	
	⋮	⋮	⋮	⋮	⋮
16 n	513	0XF002	1	12	
	⋮	⋮	⋮	⋮	⋮

FIG. 8b

00TE80*ZThES960

Page 4/7
Aug-29-00 2:09PM;
781 795 2031;
Sent By: Equipe Communications;

PORT TABLE

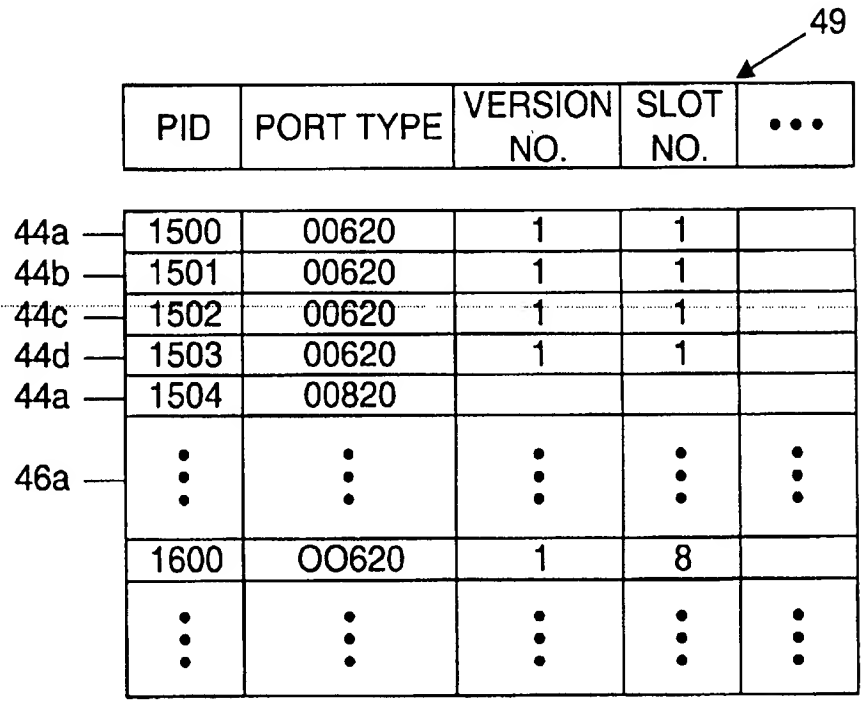
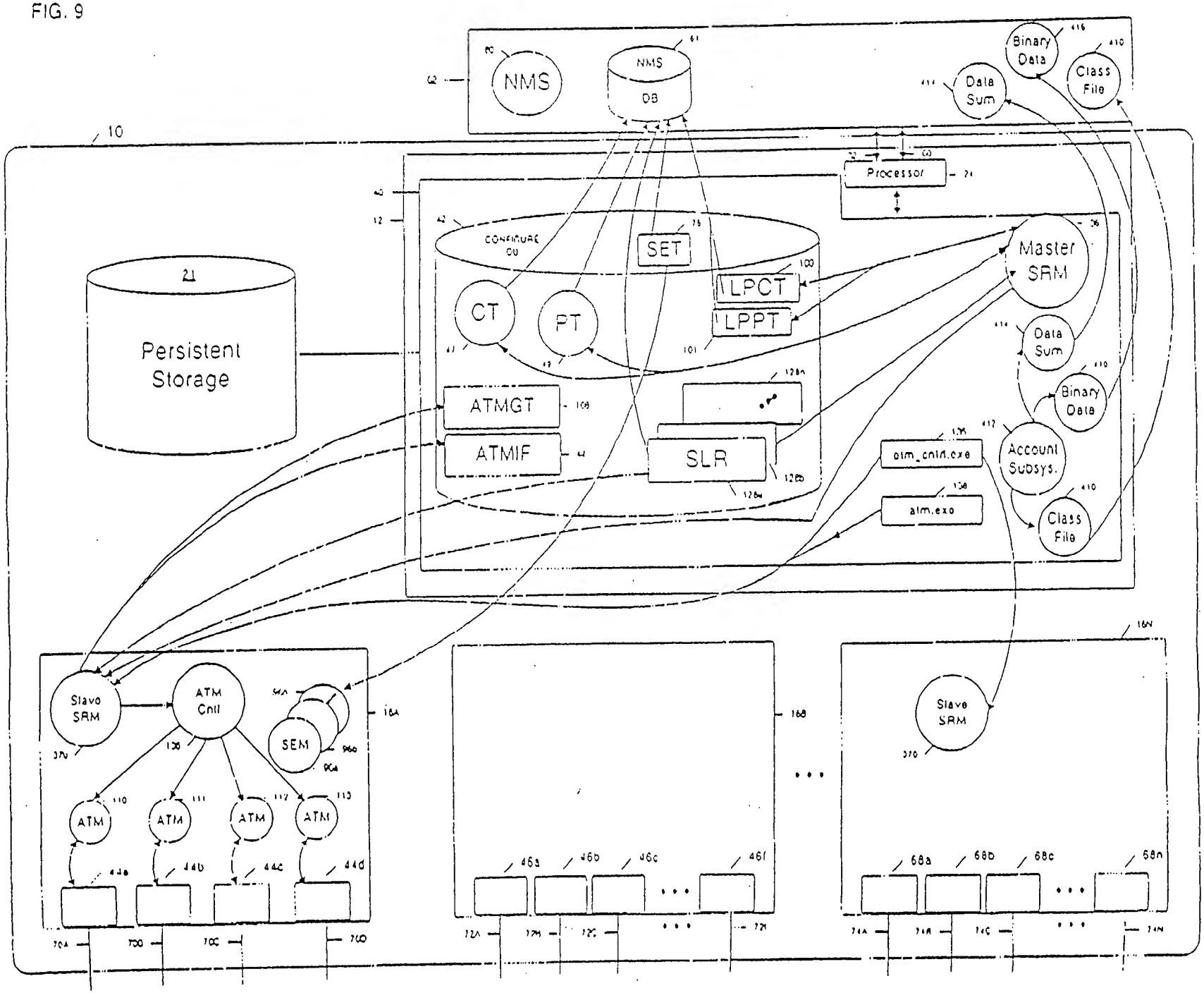


FIG. 8c

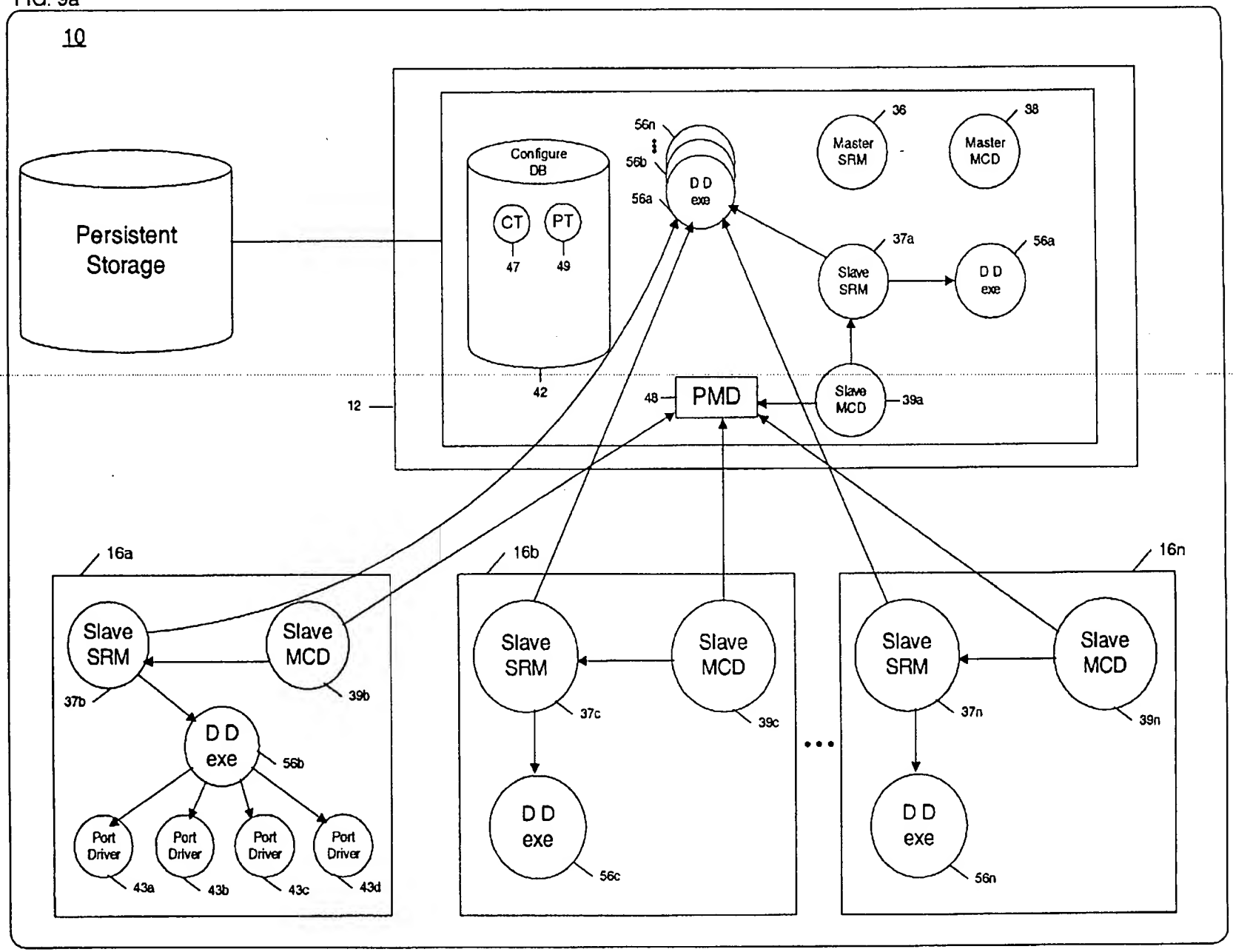
00E80"2THES960

FIG. 9



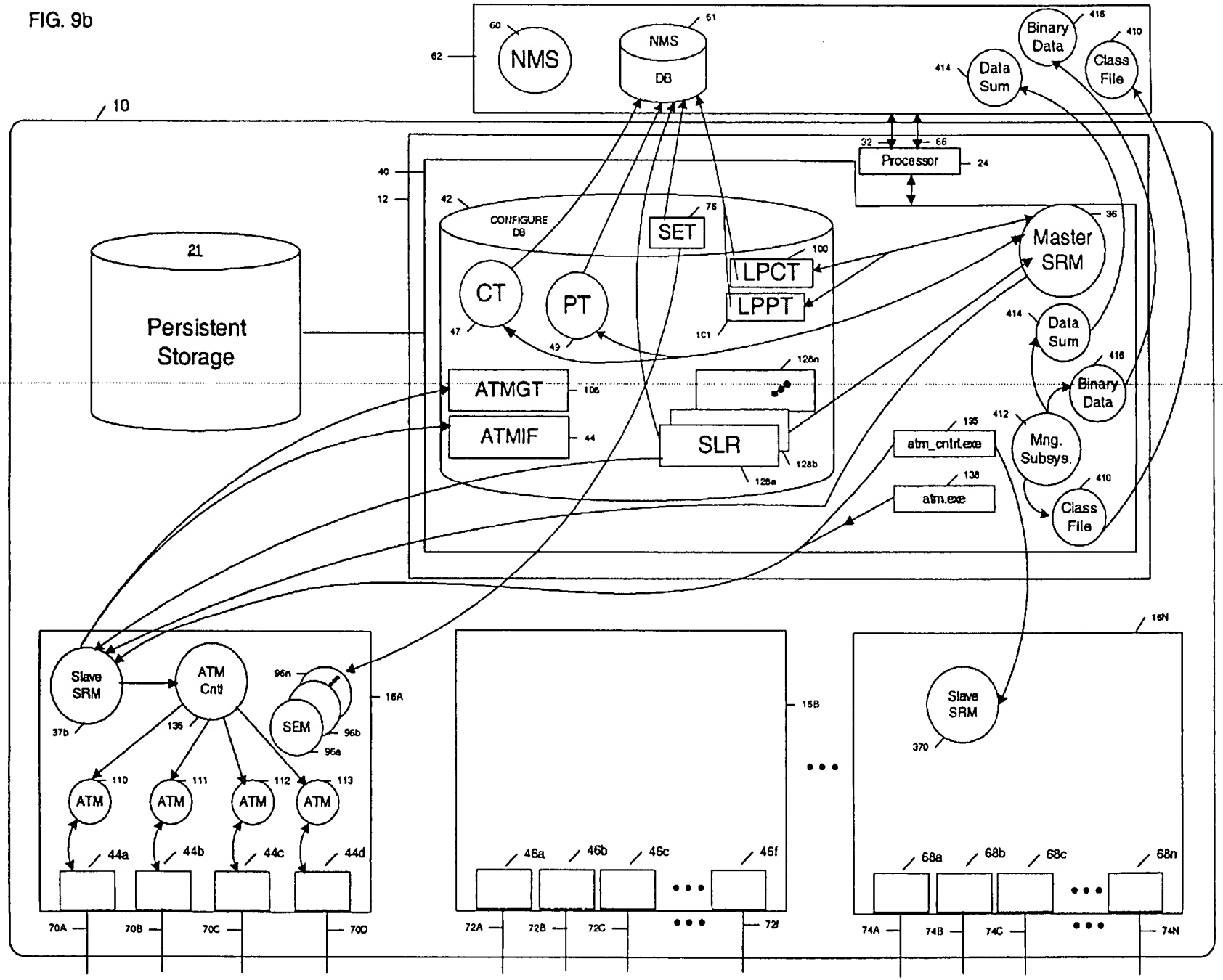
Sent By: Equipe Communications; 781 795 2031; Aug-29-00 2:09PM; Page 5/7

FIG. 9a



Sent By: Equipe Communications; 781 795 2031; Aug-29-00 2:09PM; Page 6/7

FIG. 9b



00T280" 2Th6S960

Sent By: Equipe Communications; 781 795 2031; Aug-29-00 2:09PM; Page 7/7

Fig. 9c

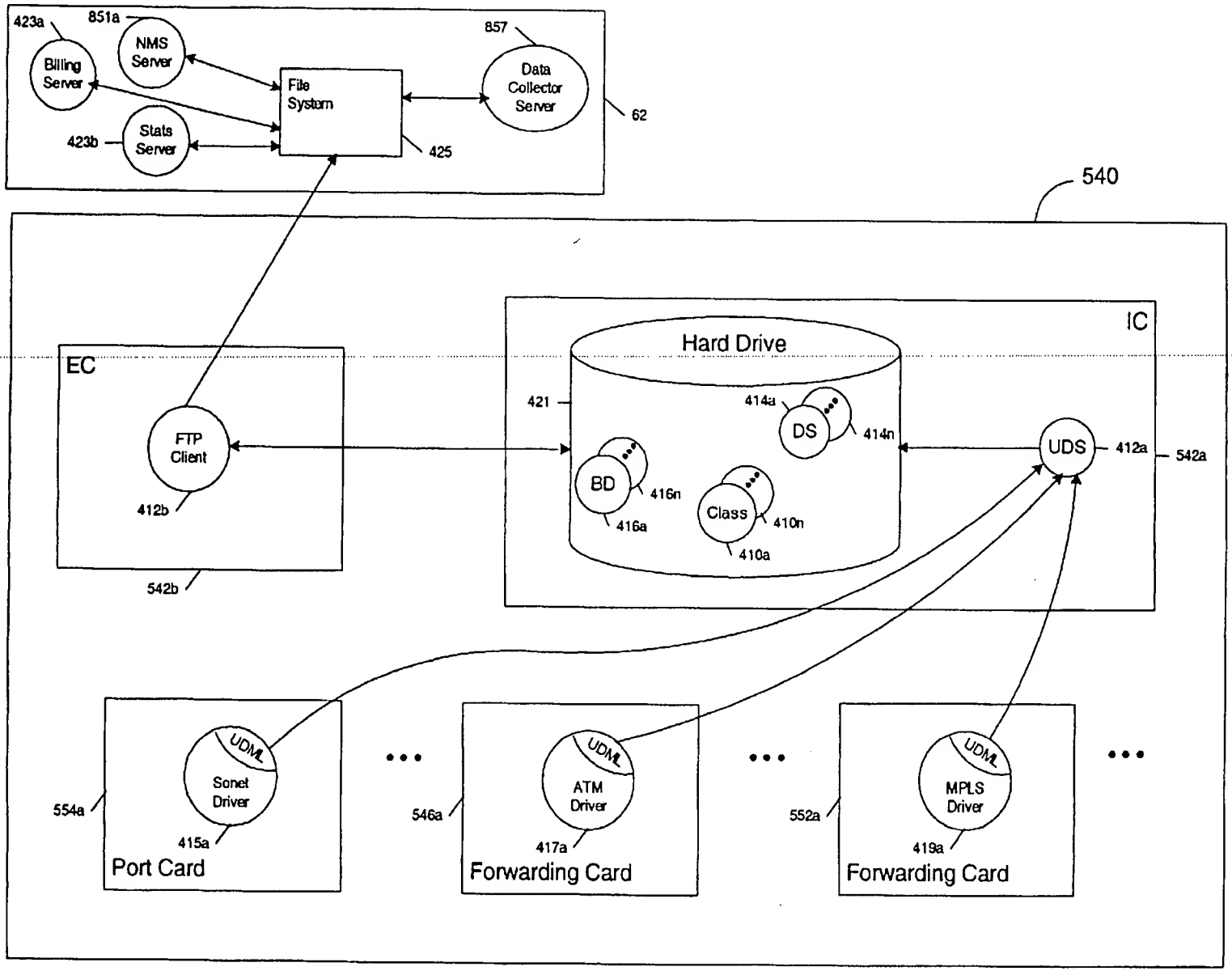


FIG. 10

Service Endpoint Table 76

	Service Endpoint #	Port PID
78	1	1500
80	2	1501
82	3	1501
84	4	1501
86	5	1502
88	6	1502
90	7	1503
92	8	1503
94	9	1503
168	10	1502
	⋮	⋮

FIG. 11a

Logical to Physical Card Table 100

	98 LID	102 Primary PID	104 Back-up PID
106	30	500	513
109	31	501	513
	⋮	⋮	⋮

FIG. 11b

Logical to Physical Port Table 101

	98 LID	102 Primary PID	104 Back-up PID
107	40	1500	1600
	⋮	⋮	⋮

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FIG. 12

ATM Group Table 108

Group #	Card LID	...
1	30	
2	30	
3	30	
4	30	

FIG. 13

ATM Interface Table 114

ATM IF	ATM Group	SE	...
1	1	1	
2	1	1	
3	1	1	
4	2	2	
5	2	3	
6	2	4	
⋮	⋮	⋮	⋮
12	3	10	
⋮	⋮	⋮	⋮

170

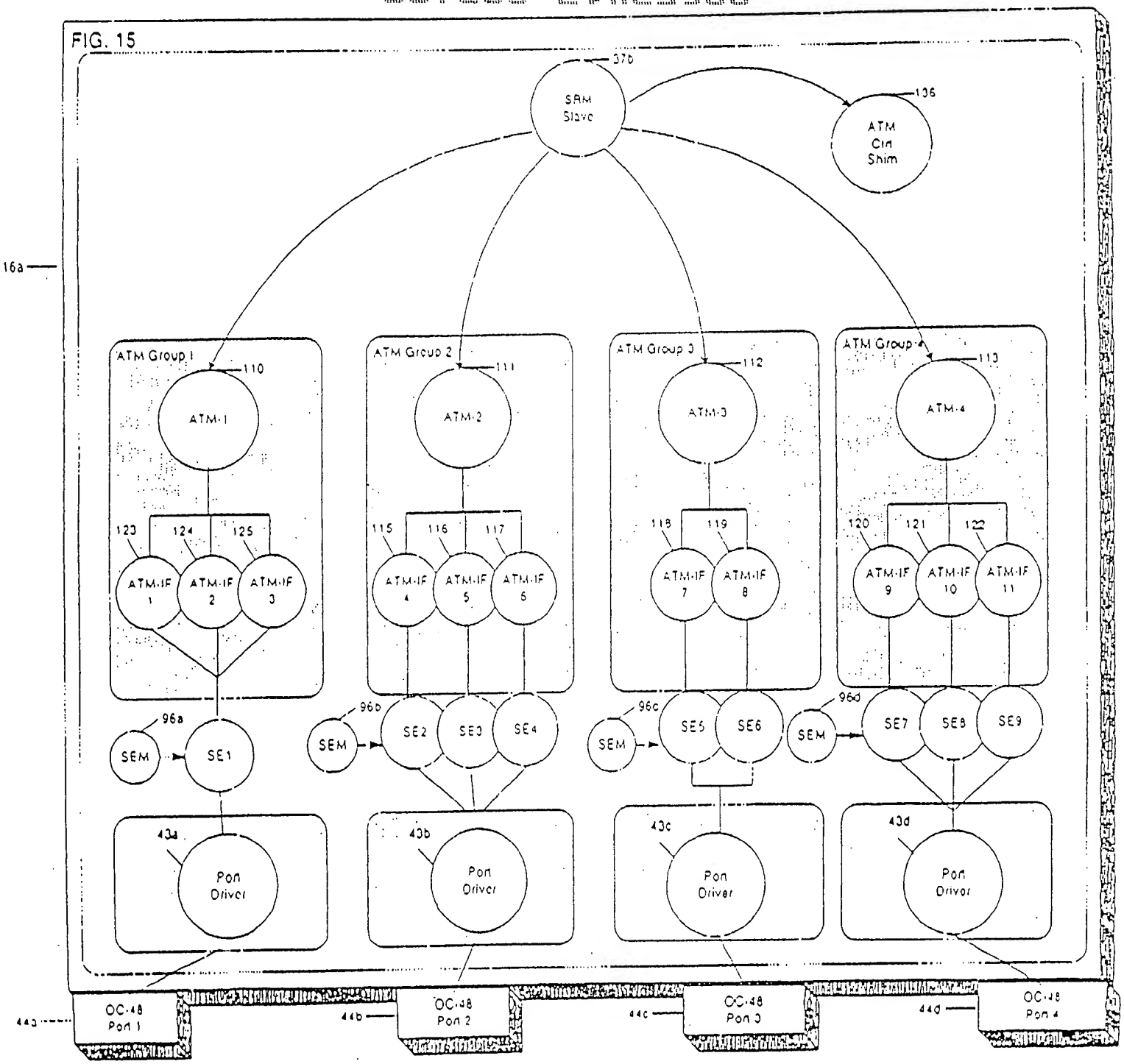
FIG. 14

Software Load Record 128a

130 Control Shim	LID 132
134 atm-cntl.exe	30

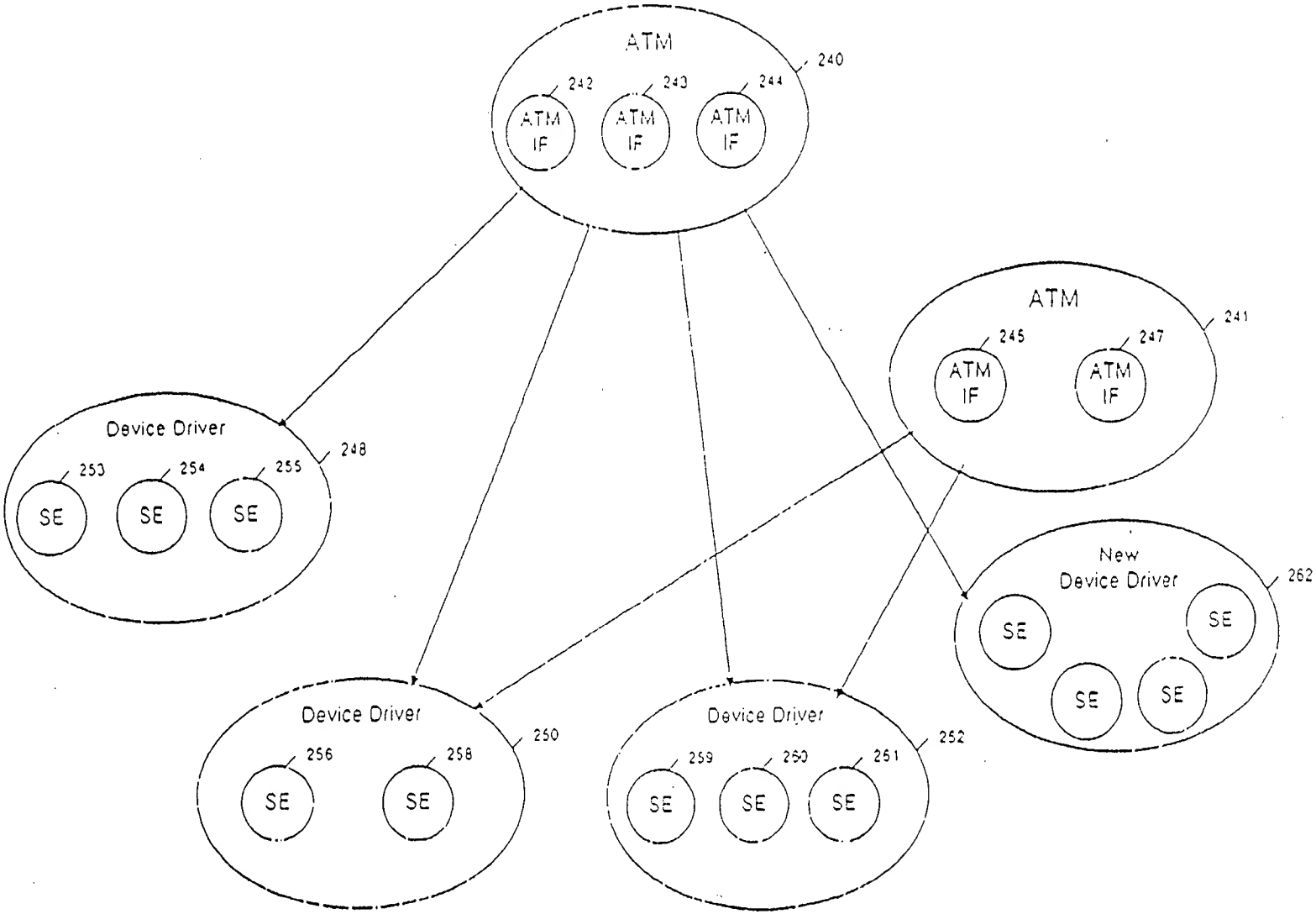
0605454 - 080400

FIG. 15


16a
37b
SAM Slave
136
ATM Cin Shim
ATM Group 1
110
ATM-1
123
124
125
ATM-IF 1
ATM-IF 2
ATM-IF 3
ATM Group 2
111
ATM-2
115
116
117
ATM-IF 4
ATM-IF 5
ATM-IF 6
ATM Group 3
112
ATM-3
118
119
ATM-IF 7
ATM-IF 8
ATM Group 4
113
ATM-4
120
121
122
ATM-IF 9
ATM-IF 10
ATM-IF 11
96a
SEM
SE1
96b
SEM
SE2
SE3
SE4
96c
SEM
SE5
SE6
96d
SEM
SE7
SE8
SE9
43a
Pon Driver
43b
Pon Driver
43c
Pon Driver
43d
Pon Driver
44a
OC-48 Pon 1
44b
OC-48 Pon 2
44c
OC-48 Pon 3
44d
OC-48 Pon 4

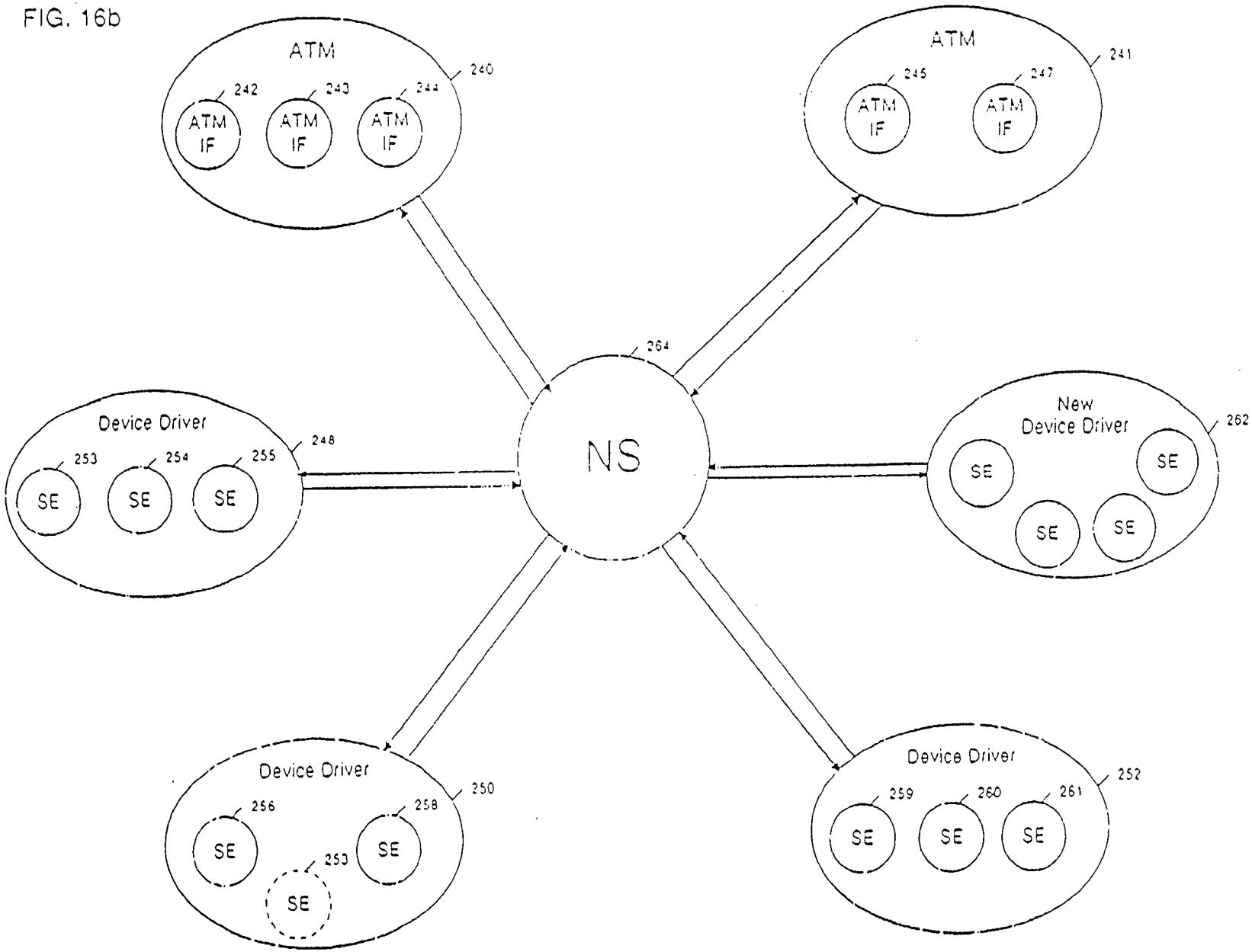
00T680" ZTHE5960

FIG. 16a



00TE80"ZThE5960

FIG. 16b



00TE80" ZTHES960

FIG. 16c

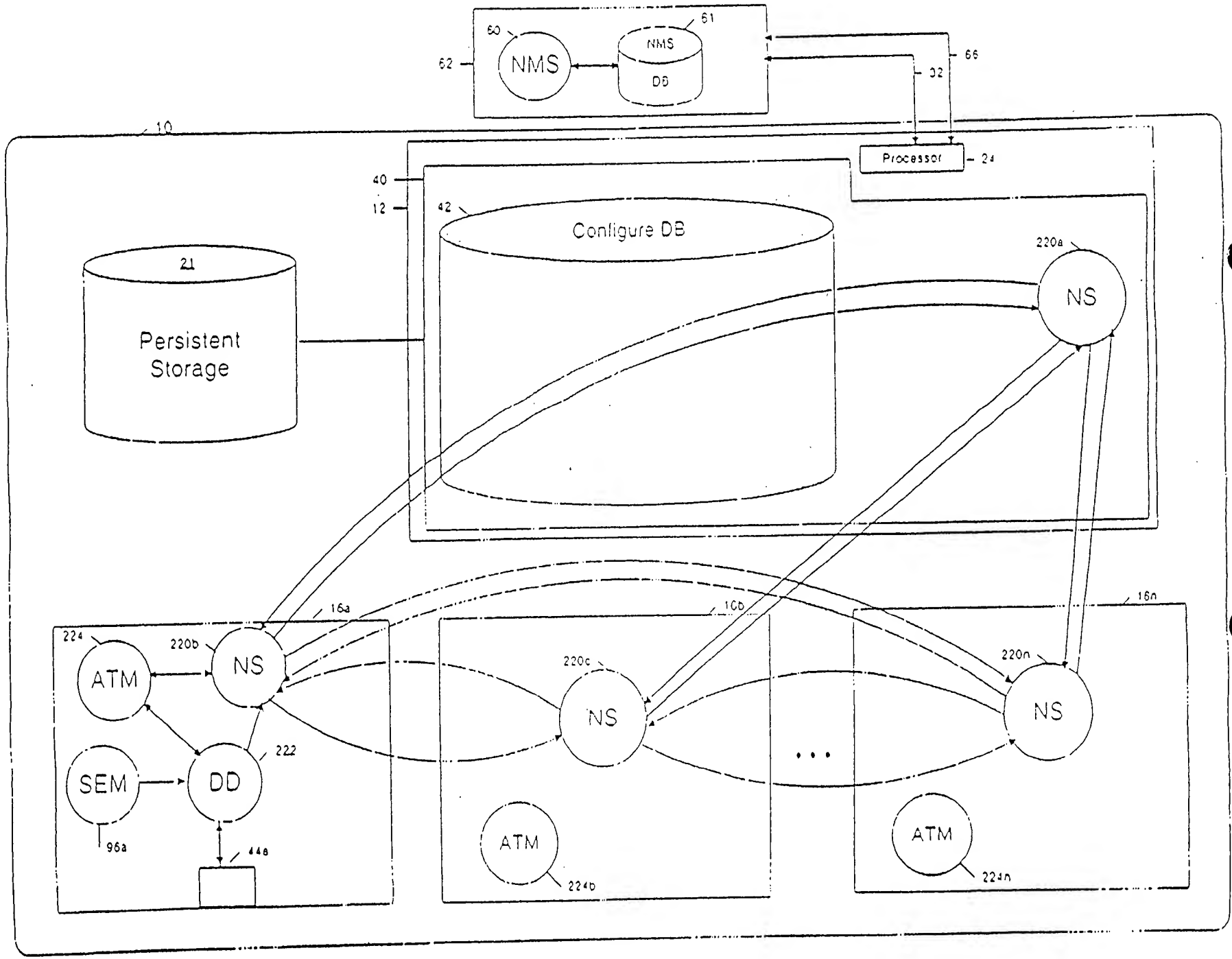
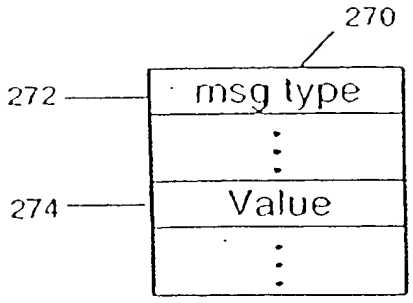


FIG. 16d



0095400.0003400

FIG. 17

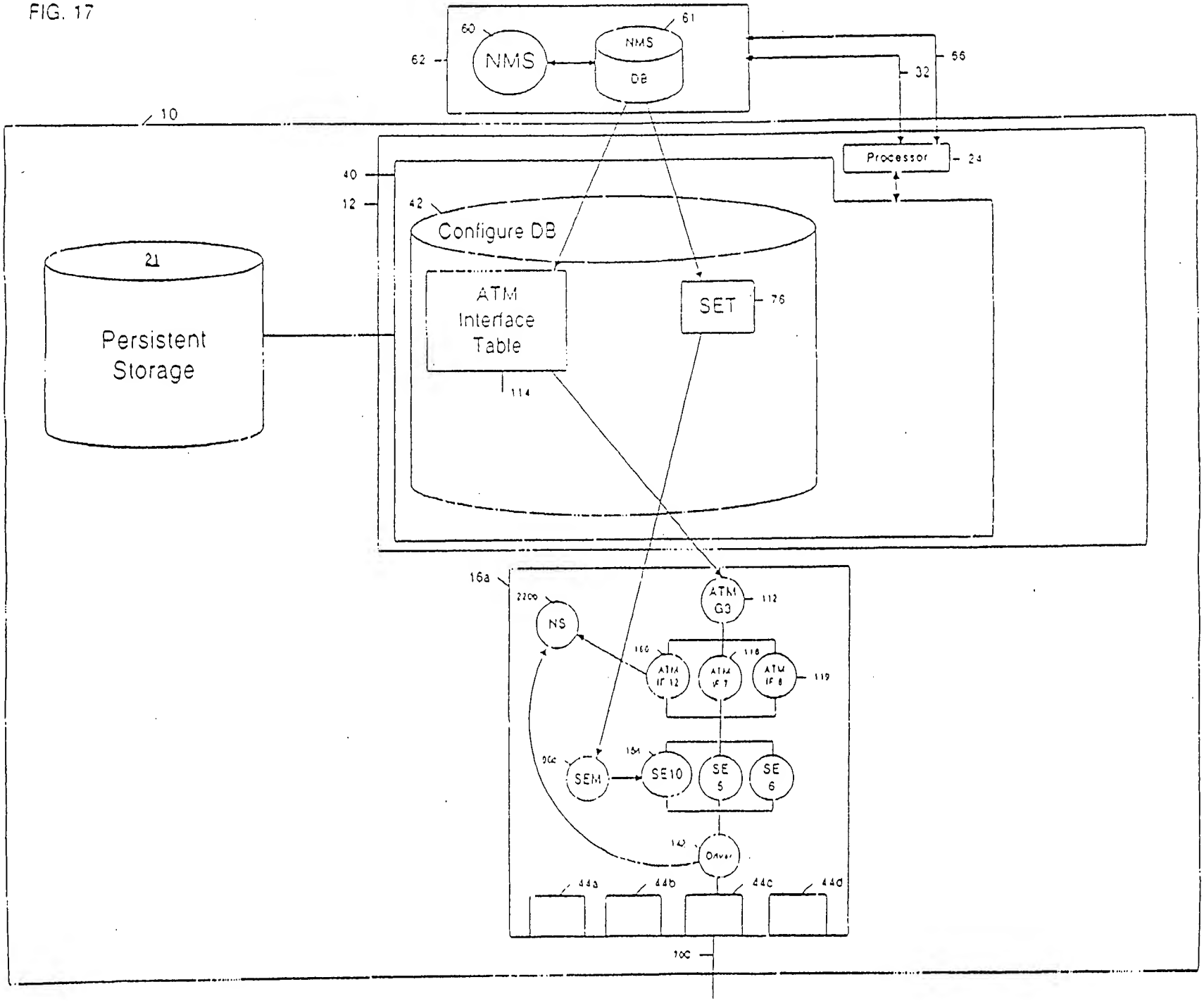
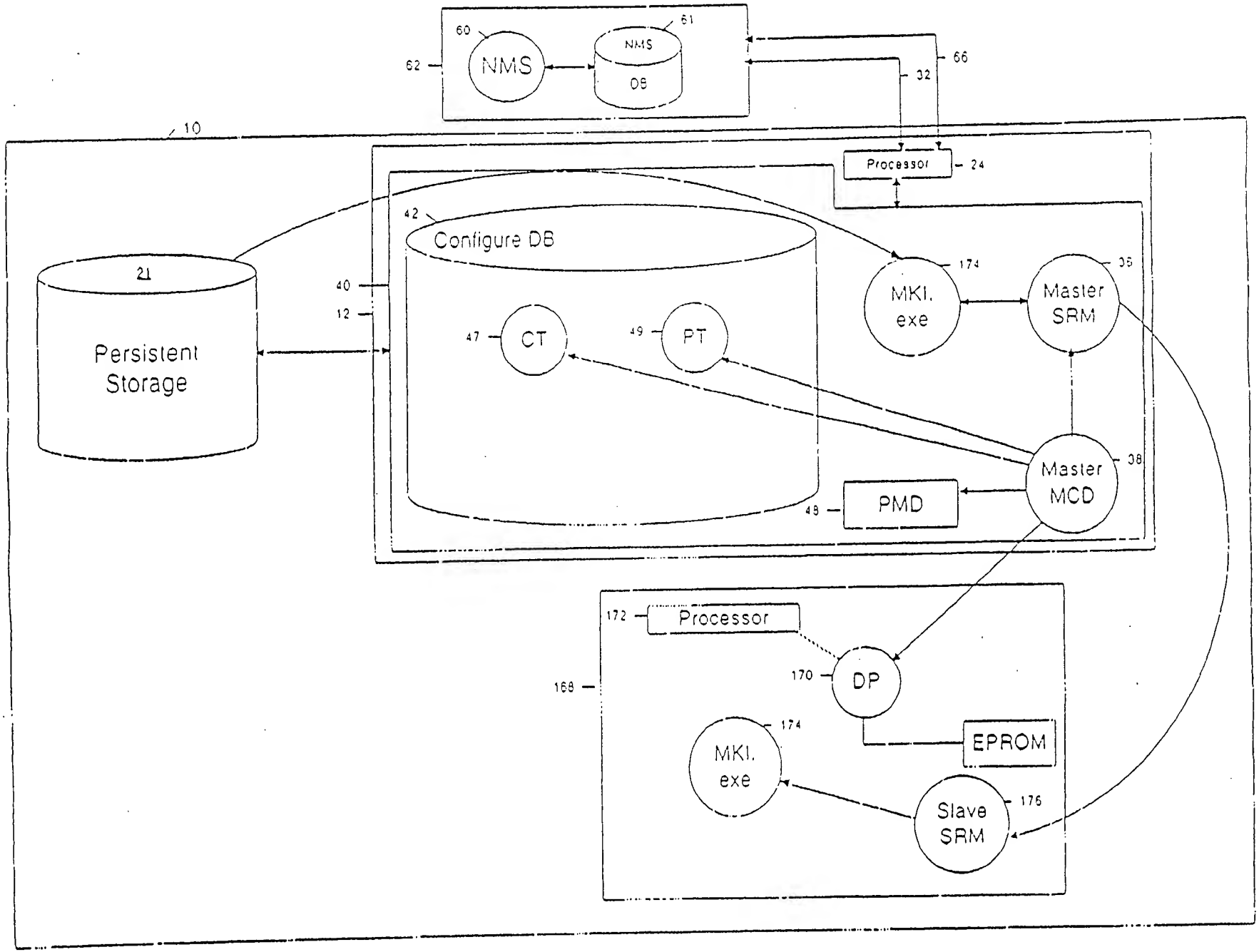

60
NMS
61
NMS
DB
62
56
32
10
Processor
24
40
12
42
Configure DB
21
Persistent Storage
ATM Interface Table
114
SET
76
16a
2200
NS
ATM G3
112
160
118
119
SEM
SE10
SE 5
SE 6
44a
44b
44c
44d
100

FIG. 18


60
NMS
61
NMS
DB
62
66
32
10
Processor
24
42
Configure DB
21
Persistent Storage
40
12
47
CT
49
PT
174
MKI. exe
Master SRM
36
Master MCD
38
48
PMD
172
Processor
168
170
DP
174
MKI. exe
EPROM
Slave SRM
176

00E80"ZTHE5960

FIG. 19

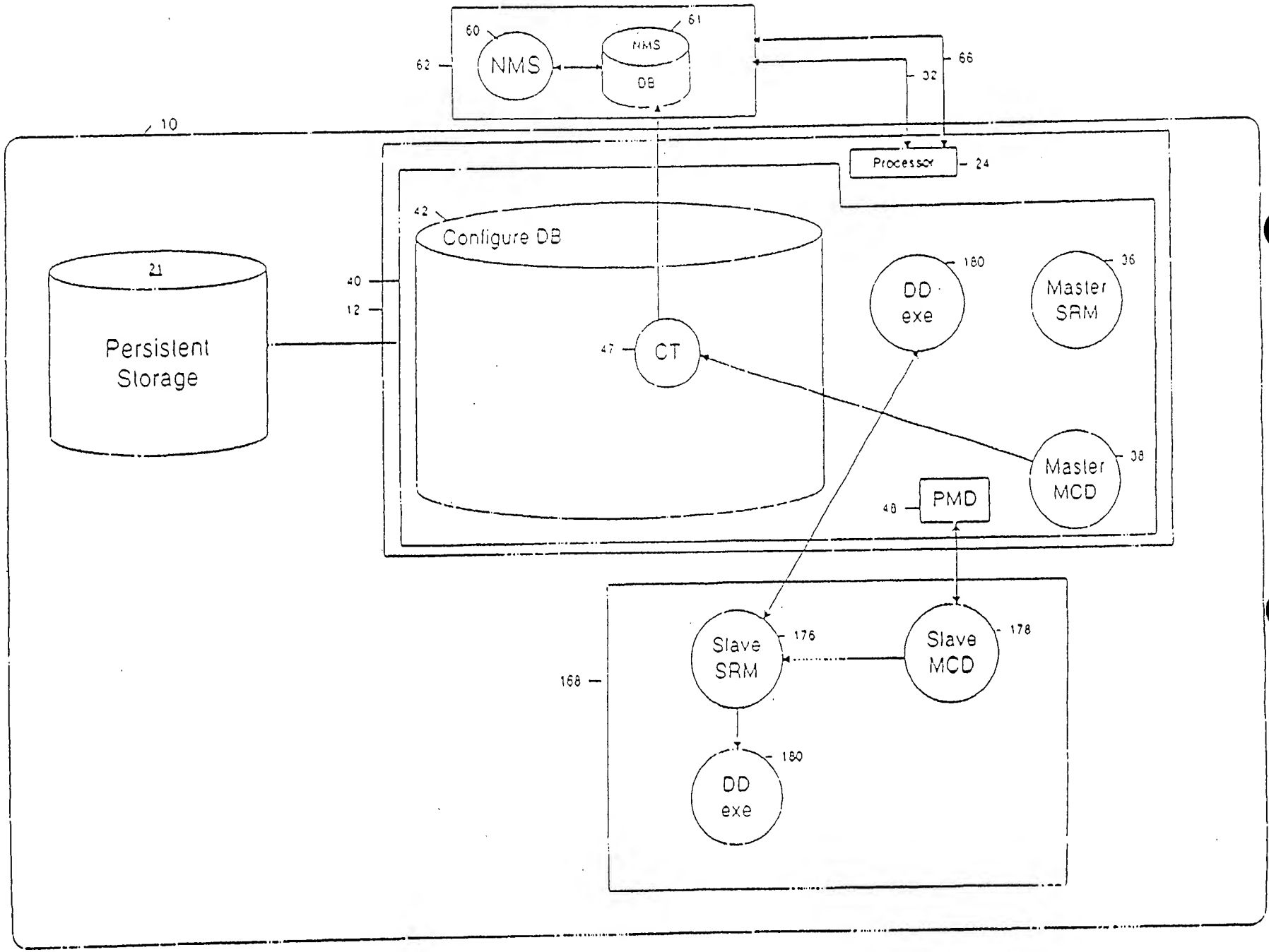
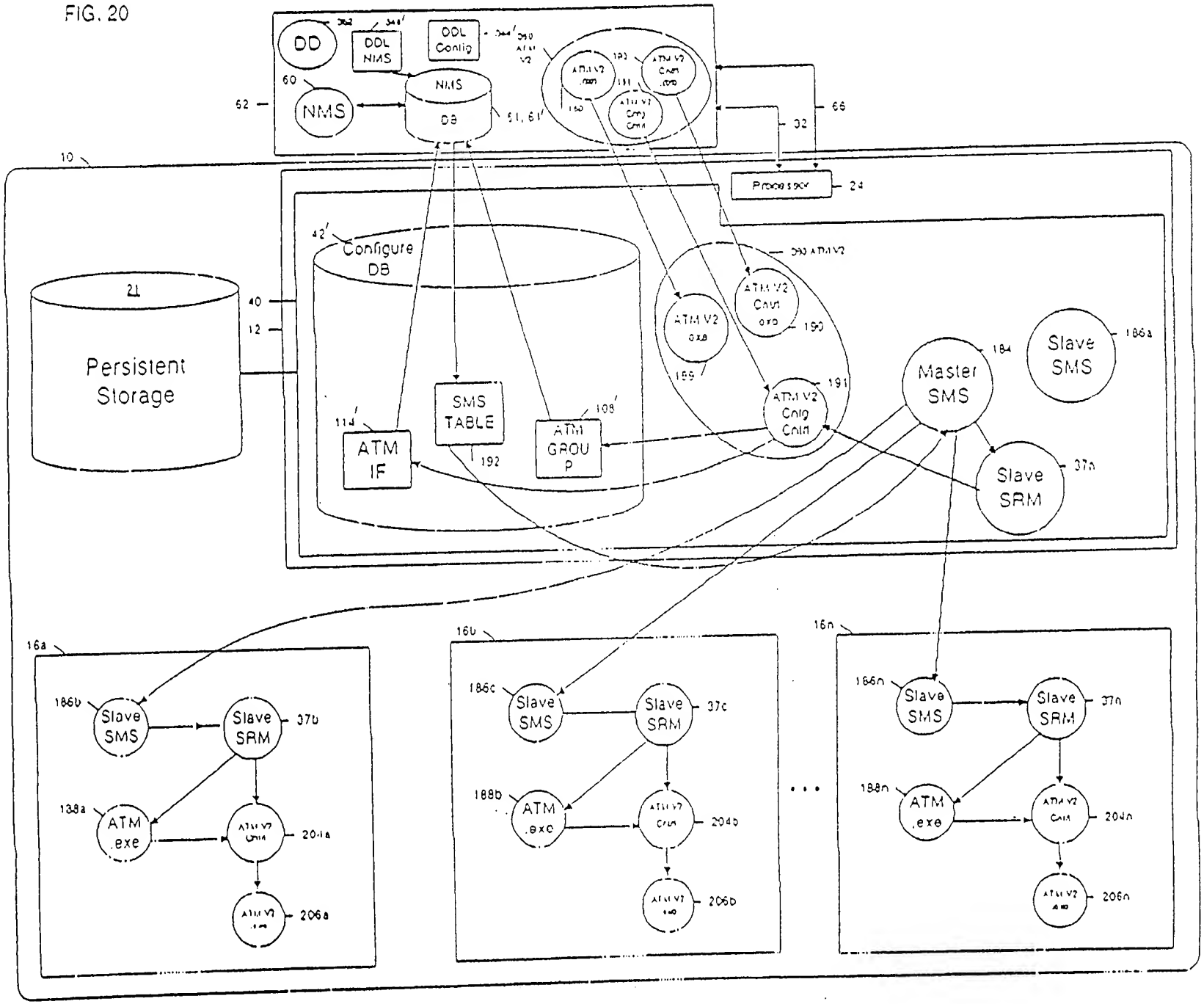
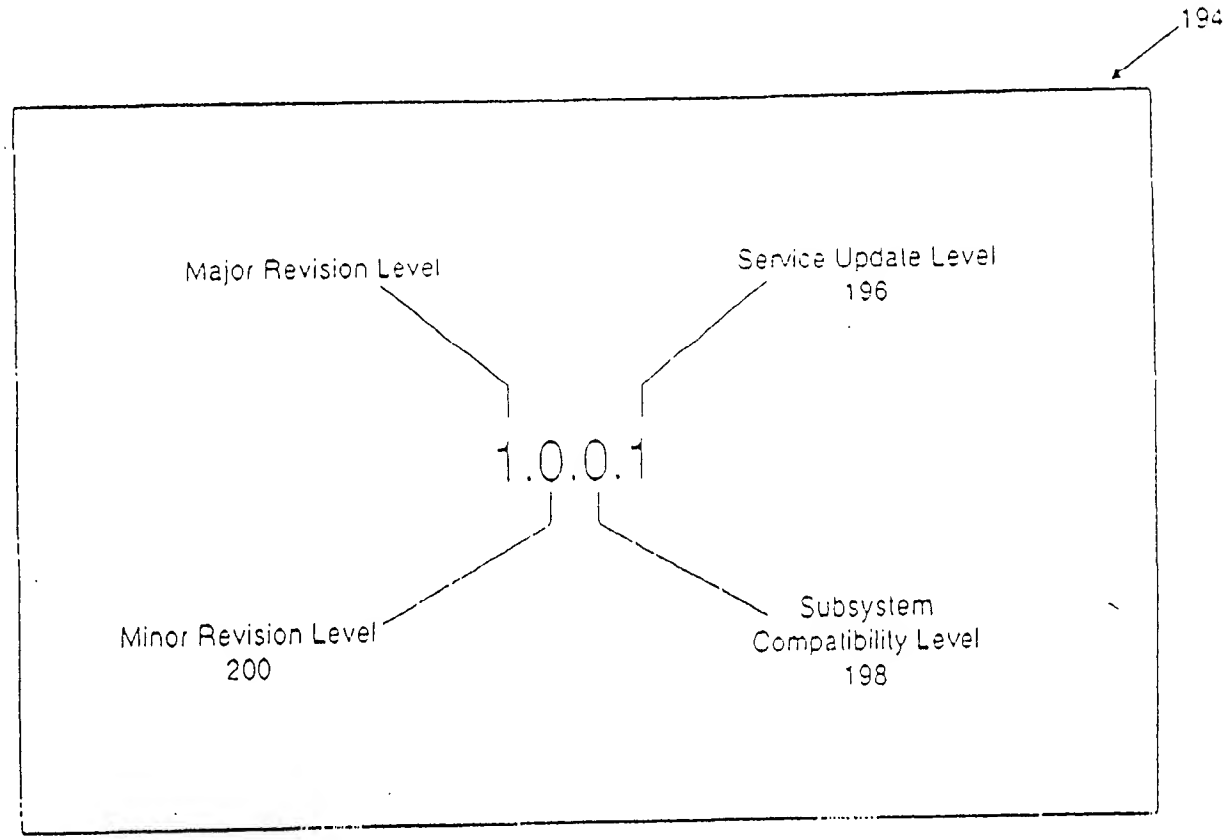


FIG. 20


DD
DDL NMS
DDL Config
NMS
DB
60
62
66
32
10
Process
24
Configure DB
42
21
Persistent Storage
40
12
ATM V2 Config
190
ATM V2 exe
189
191
Master SMS
184
Slave SMS
186a
Slave SRM
37a
SMS TABLE
192
ATM IF
114
ATM GROUP
108
16a
186b
Slave SMS
Slave SRM
37b
188a
ATM .exe
204a
206a
16b
186c
Slave SMS
Slave SRM
37c
188b
ATM .exe
204b
206b
16n
186n
Slave SMS
Slave SRM
37n
188n
ATM .exe
204n
206n

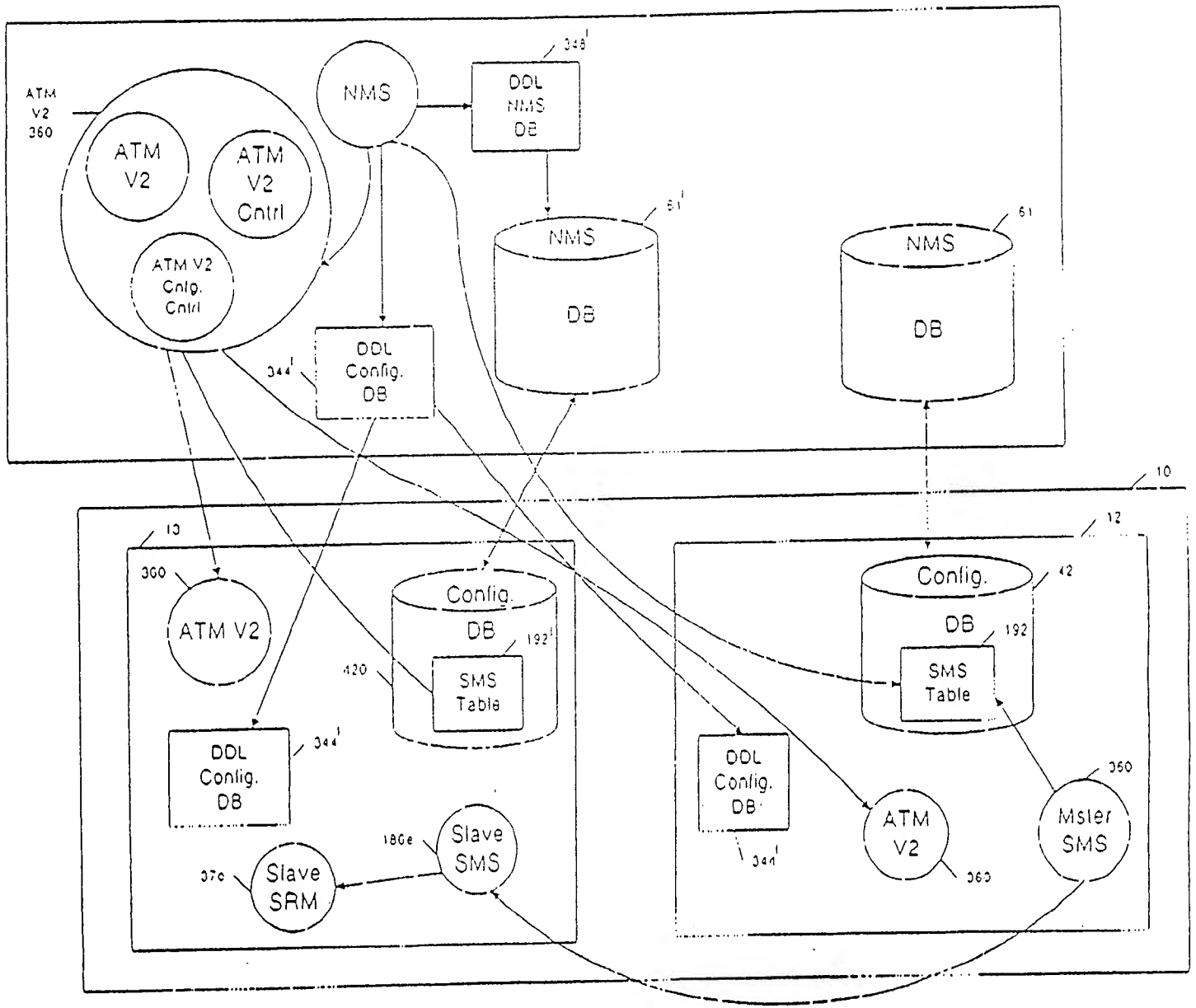
00TE80" ZTHE5960

FIG. 21



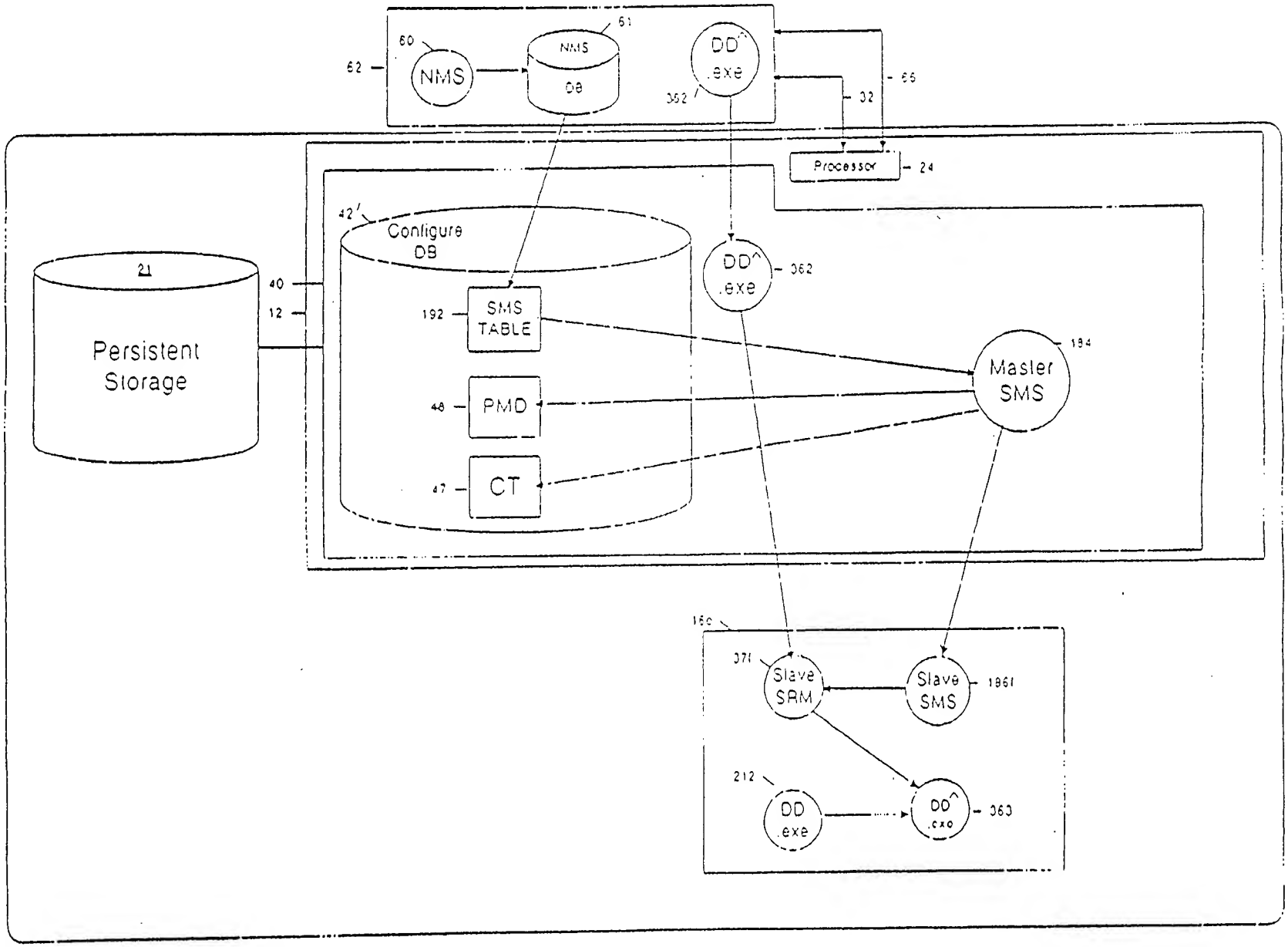
0076807 2THE5960

FIG. 22



00TE80" 2THE5960

FIG. 23



0016807 2TH5960

FIG. 24

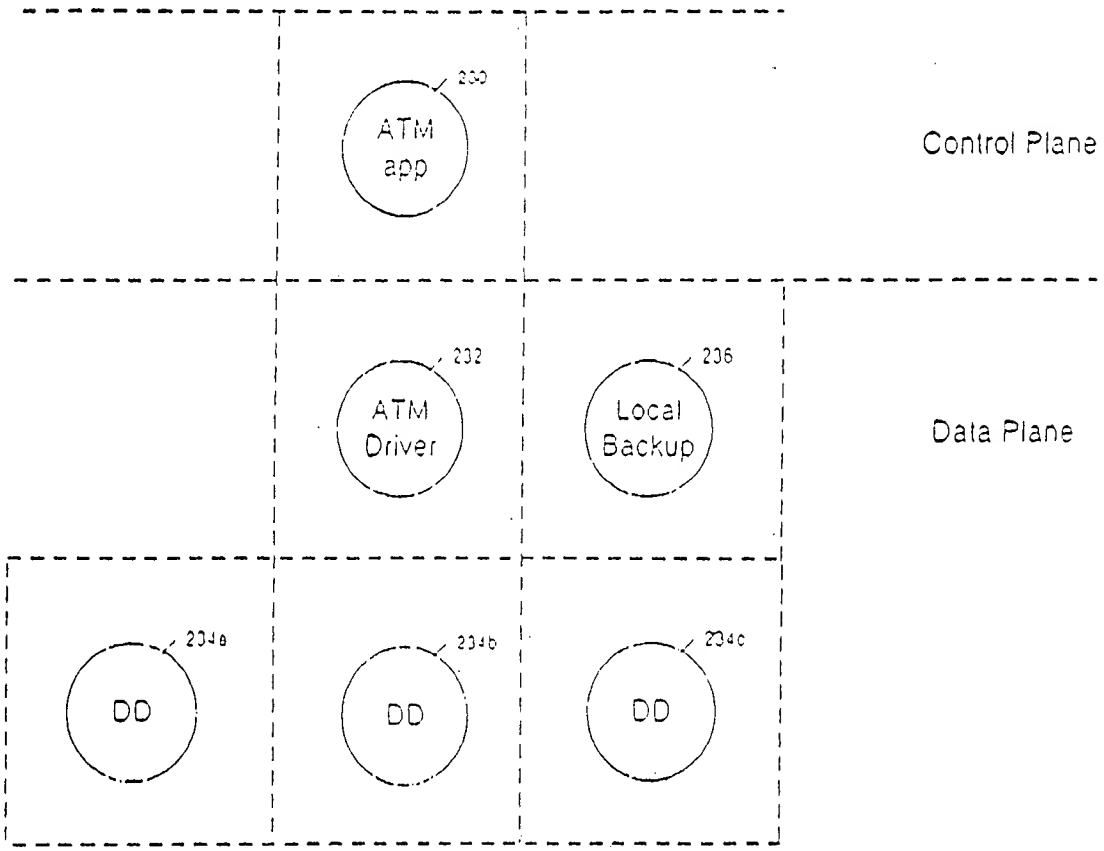


FIG. 25

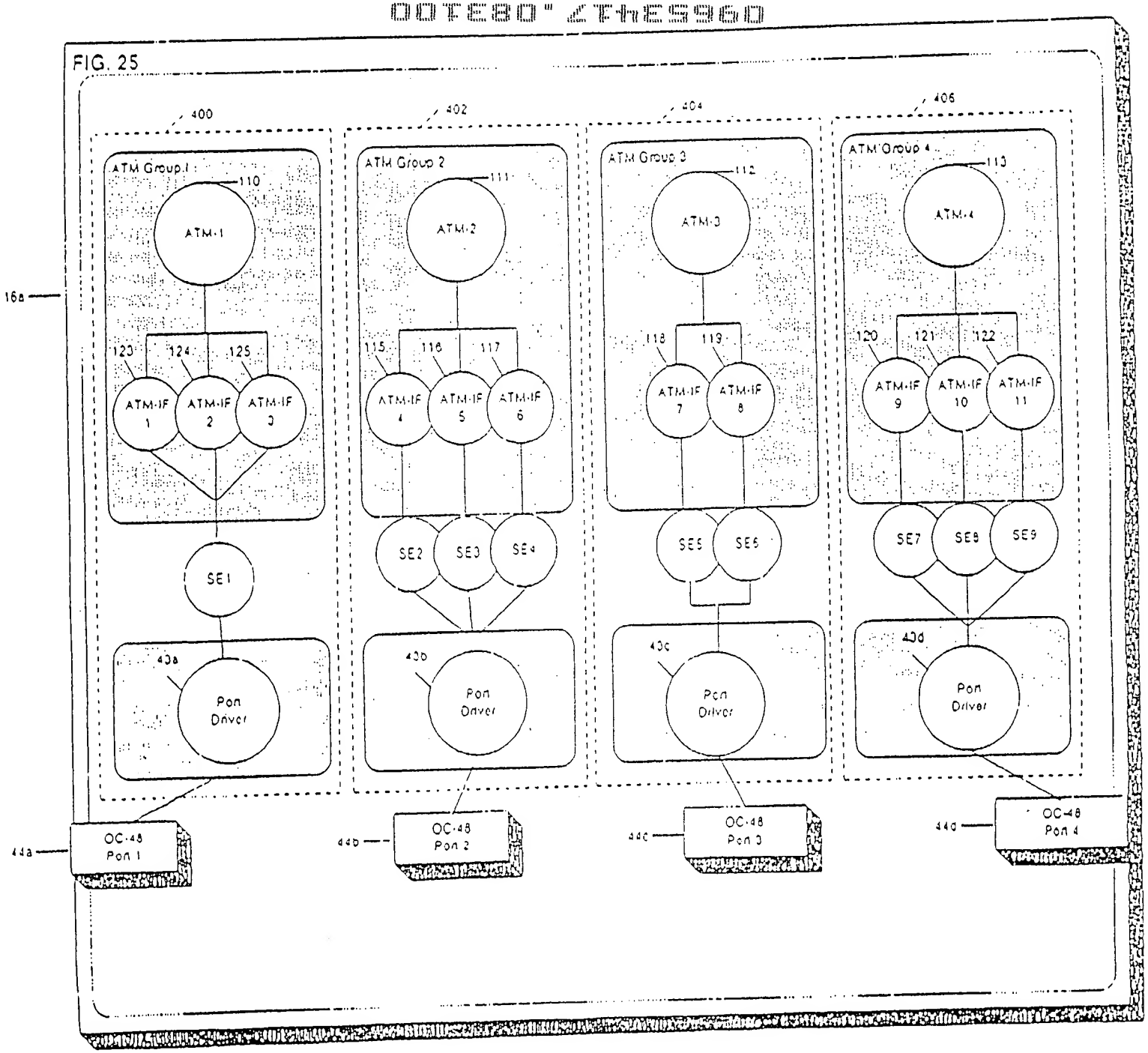
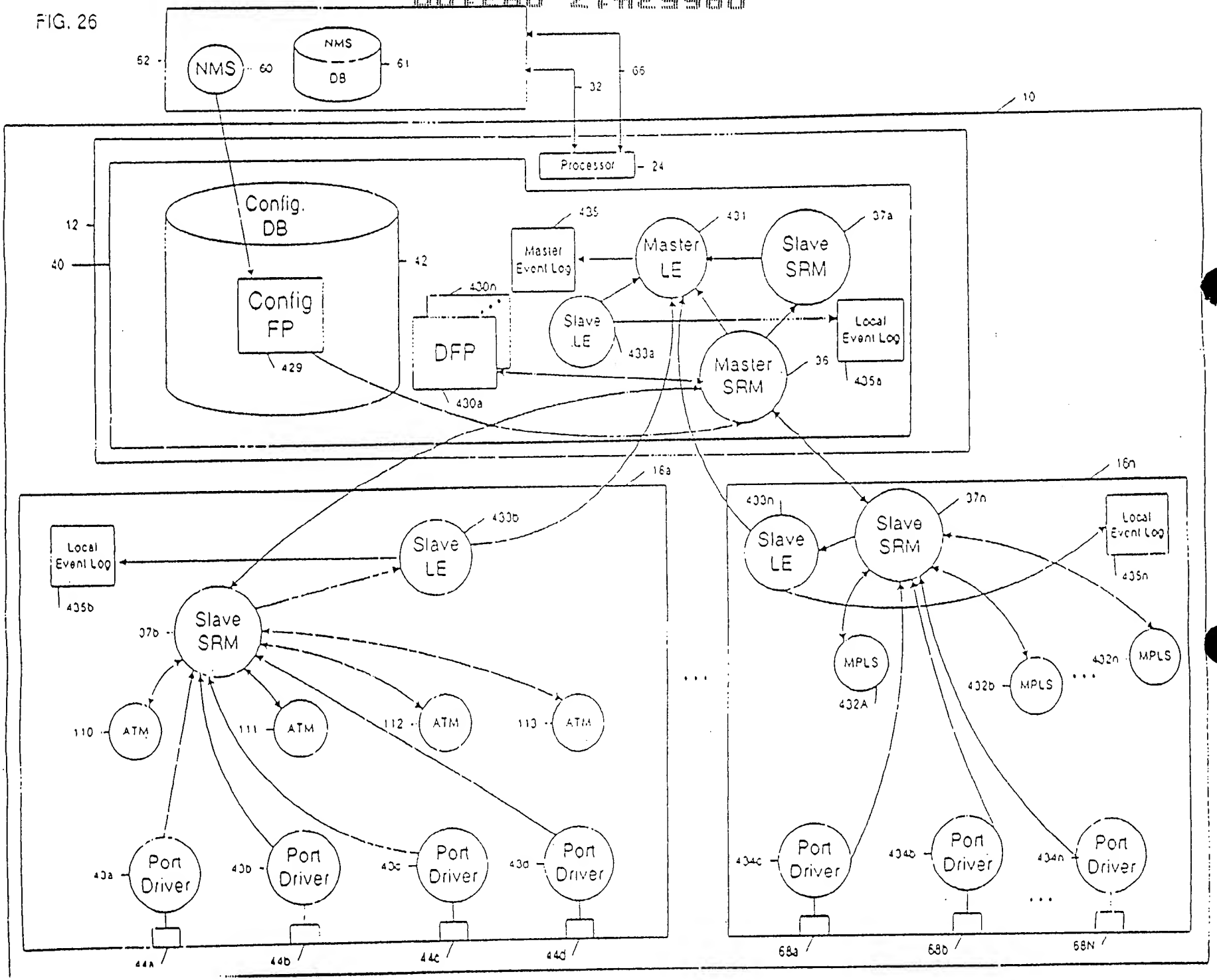
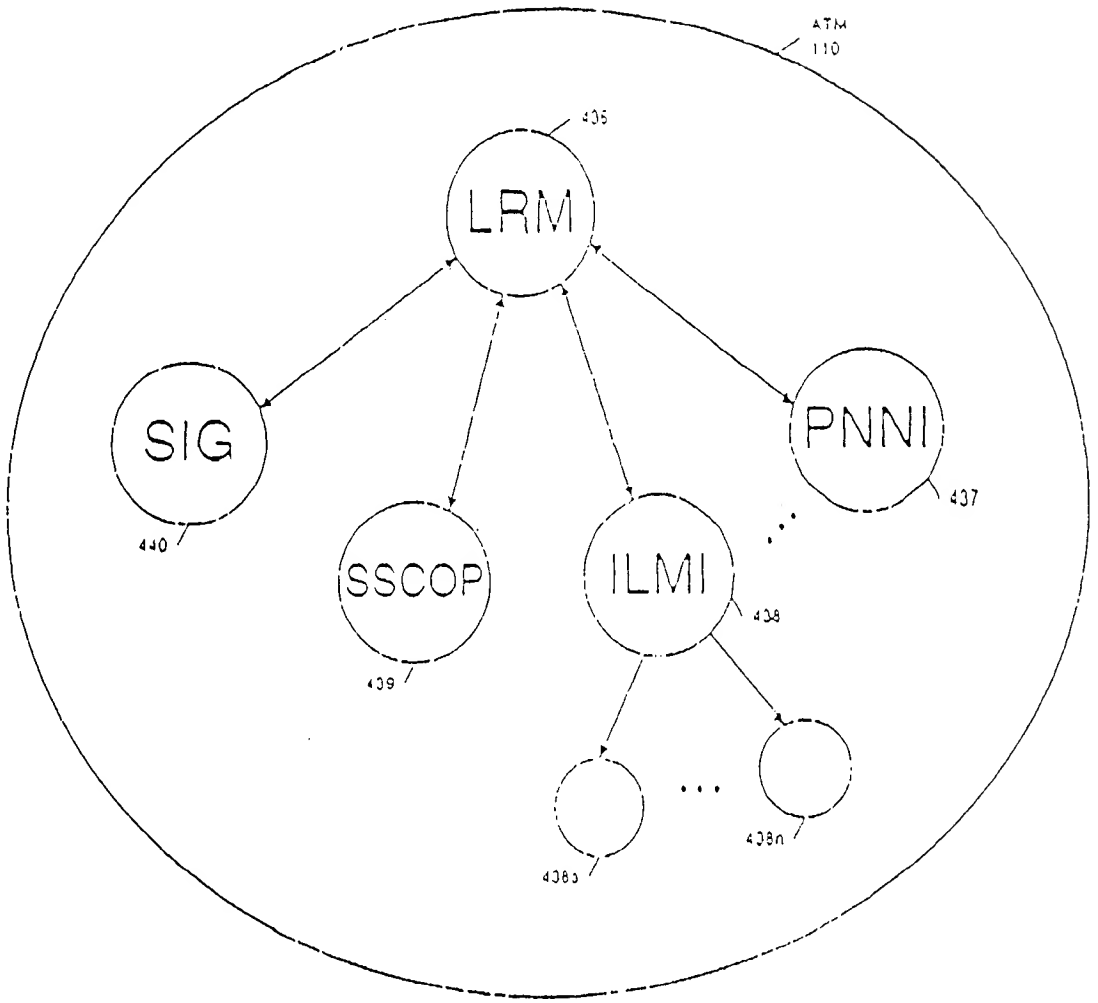

400
402
404
406
16a
ATM Group 1
ATM Group 2
ATM Group 3
ATM Group 4
110
111
112
113
ATM-1
ATM-2
ATM-3
ATM-4
123
124
125
115
116
117
118
119
120
121
122
ATM-IF 1
ATM-IF 2
ATM-IF 3
ATM-IF 4
ATM-IF 5
ATM-IF 6
ATM-IF 7
ATM-IF 8
ATM-IF 9
ATM-IF 10
ATM-IF 11
SE1
SE2
SE3
SE4
SE5
SE6
SE7
SE8
SE9
430a
430b
430c
430d
Pon Driver
Pon Driver
Pon Driver
Pon Driver
44a
44b
44c
44d
OC-48 Pon 1
OC-48 Pon 2
OC-48 Pon 3
OC-48 Pon 4

FIG. 26


NMS
DB
52
60
61
32
65
10
Processor
24
12
40
Config. DB
42
Config FP
429
DFP
430a
430n
Master Event Log
435
Master LE
431
Slave SRM
37a
Slave LE
433a
Local Event Log
435a
Master SRM
36
16a
Slave LE
433b
Local Event Log
435b
Slave SRM
37b
110
ATM
111
ATM
112
ATM
113
ATM
Port Driver
43a
Port Driver
43b
Port Driver
43c
Port Driver
43d
44a
44b
44c
44d
16n
433n
Slave LE
Slave SRM
37n
Local Event Log
435n
MPLS
432A
MPLS
432b
MPLS
432n
Port Driver
434c
Port Driver
434b
Port Driver
434n
68a
68b
68N

00TE80"<ZTHES960

FIG. 27



00TE80" 2THE5960

FIG. 28

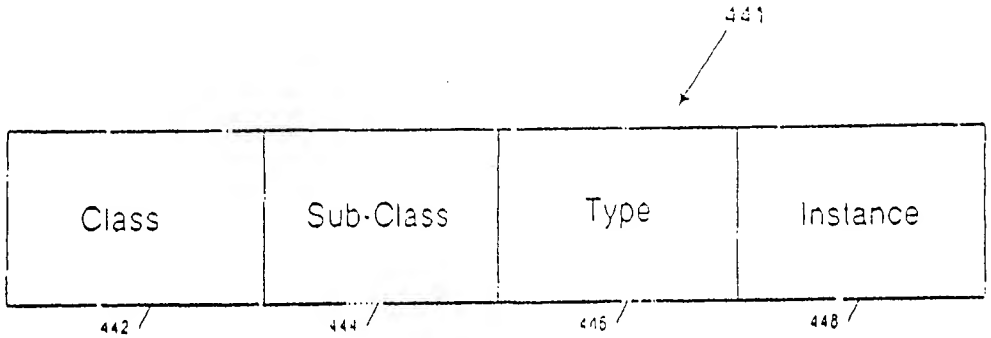


FIG. 29

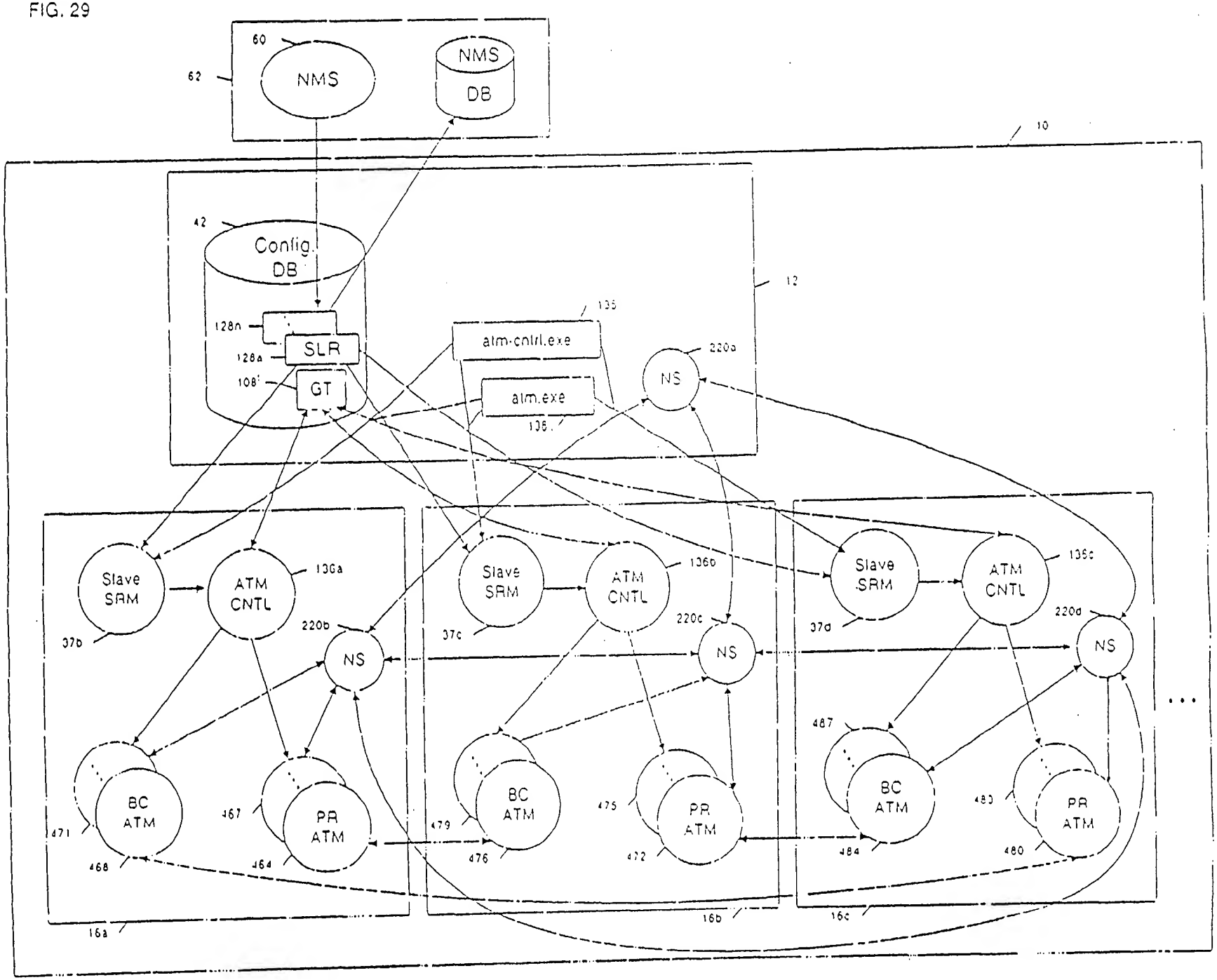

60
62
NMS
NMS
DB
10
42
Config.
DB
12
128n
128a
108'
SLR
GT
135
alm-cntrl.exe
alm.exe
136
220a
NS
Slave
SRM
ATM
CNTL
136a
37b
220b
NS
BC
ATM
471
468
PR
ATM
467
464
Slave
SRM
ATM
CNTL
136b
37c
220c
NS
BC
ATM
479
476
PR
ATM
475
472
Slave
SRM
ATM
CNTL
136c
37d
220d
NS
487
BC
ATM
484
PR
ATM
483
480
16a
16b
16c

FIG.30

Group Table 108'

	Group #	Primary Card LID (447)	Backup Card LID (449)	...
450	1	30	31	
451	2	30	31	
452	3	30	31	
453	4	30	31	
454	5	31	32	
455	6	31	32	
456	7	31	32	
457	8	31	32	
458	9	32	30	
459	10	32	30	
460	11	32	30	
461	12	32	30	
	⋮	⋮	⋮	⋮

DOCKET NO. 74-95-960

Fig. 31a

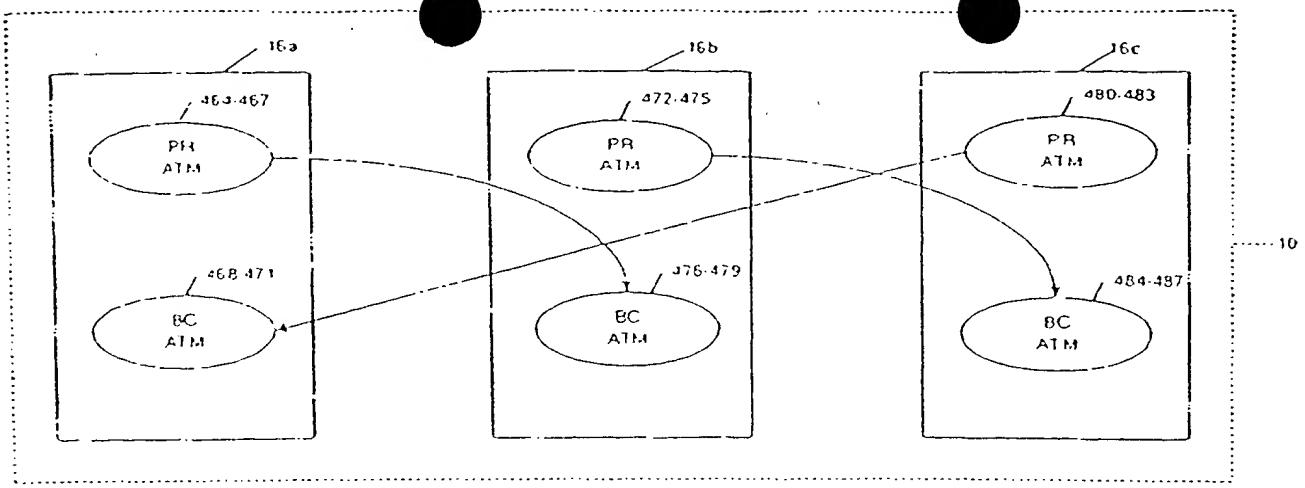


Fig. 31b

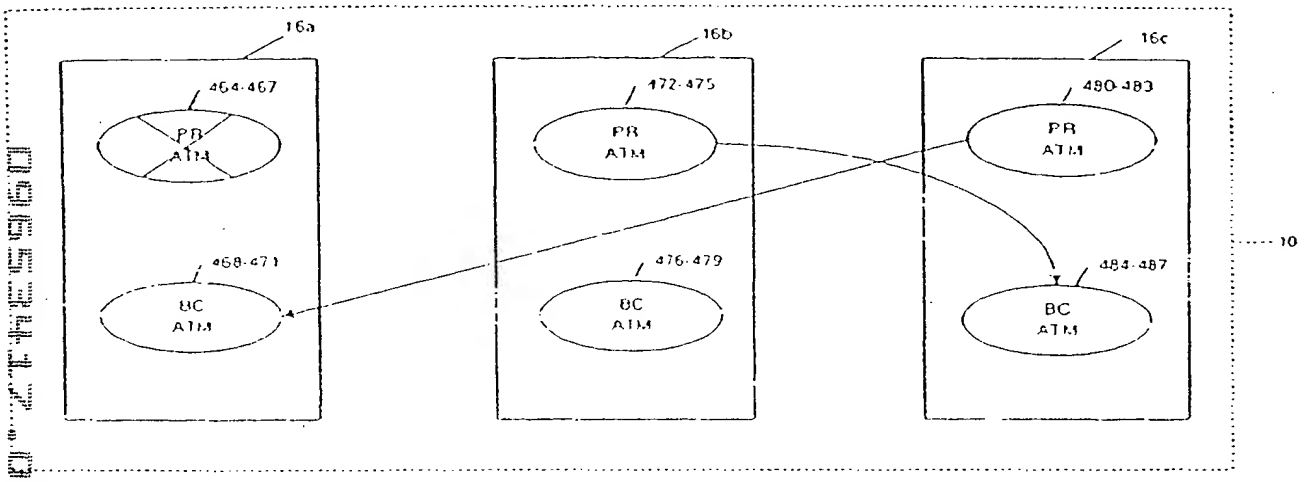


Fig. 31c

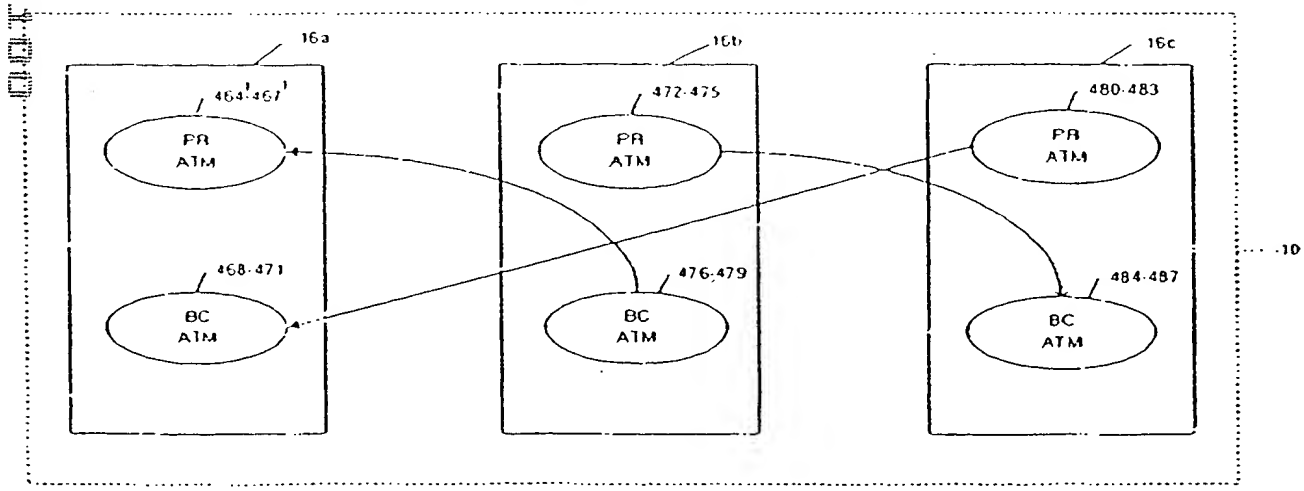


Fig. 32a

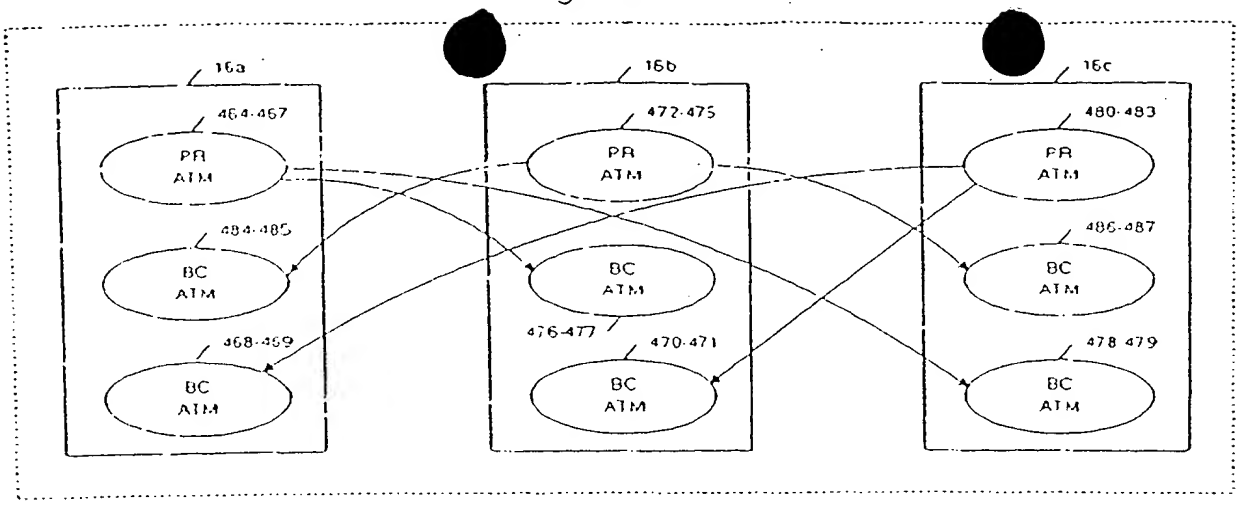


Fig. 32b

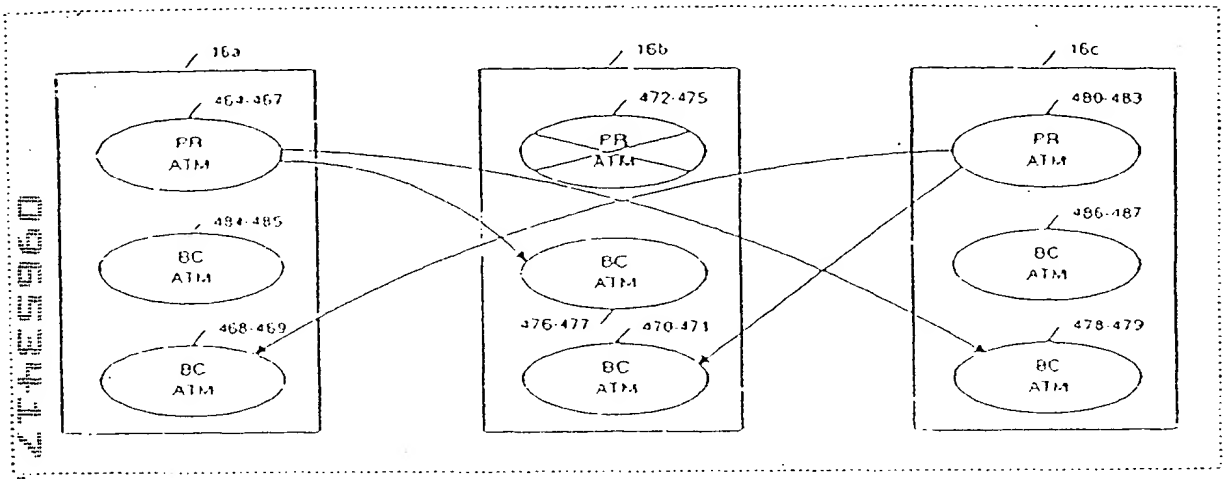


Fig. 32c

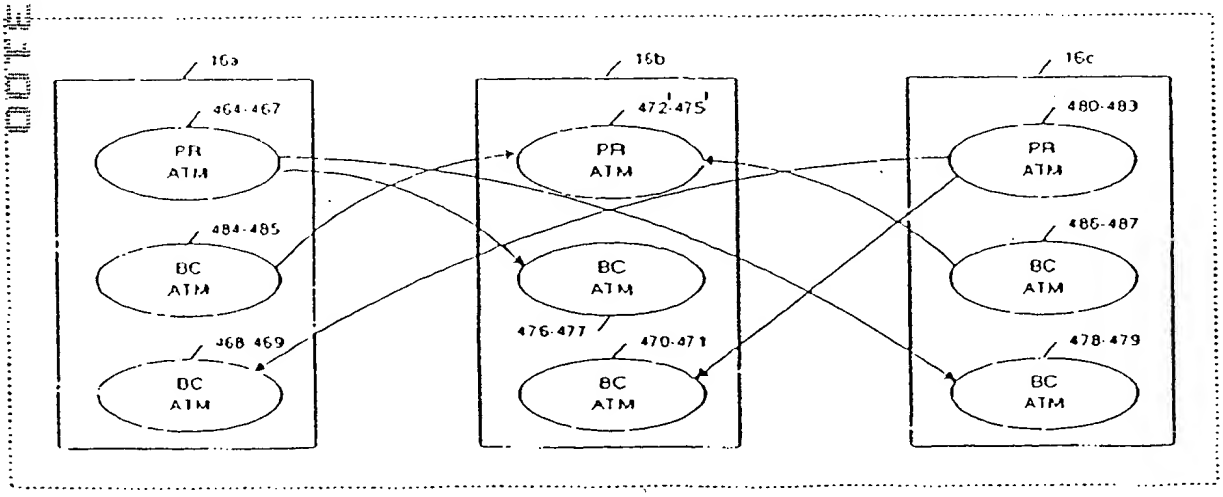


FIG. 33a

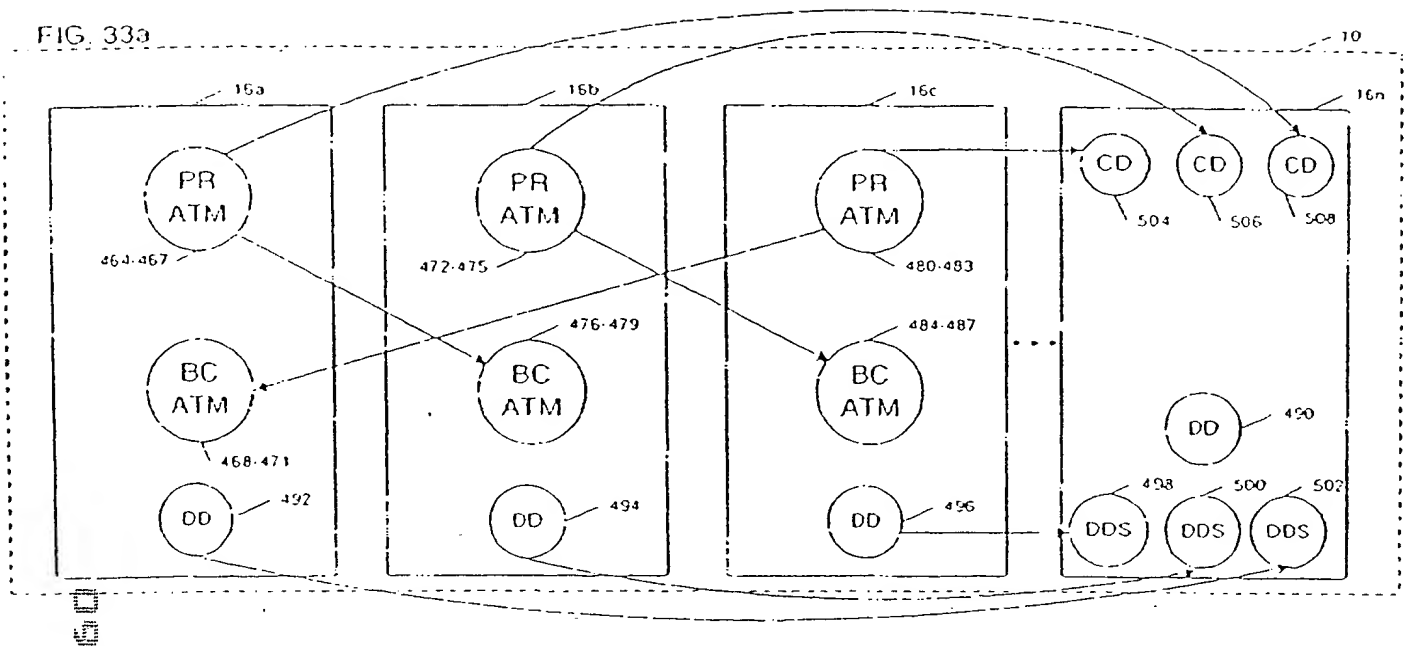


FIG. 33b

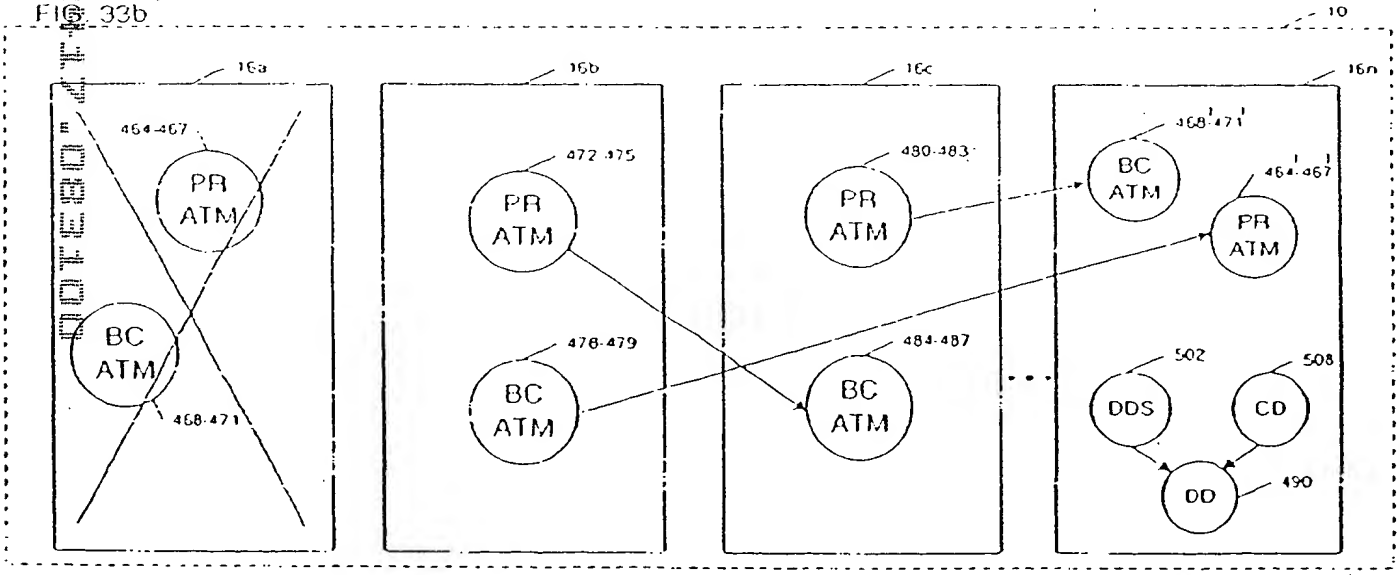


FIG. 33c

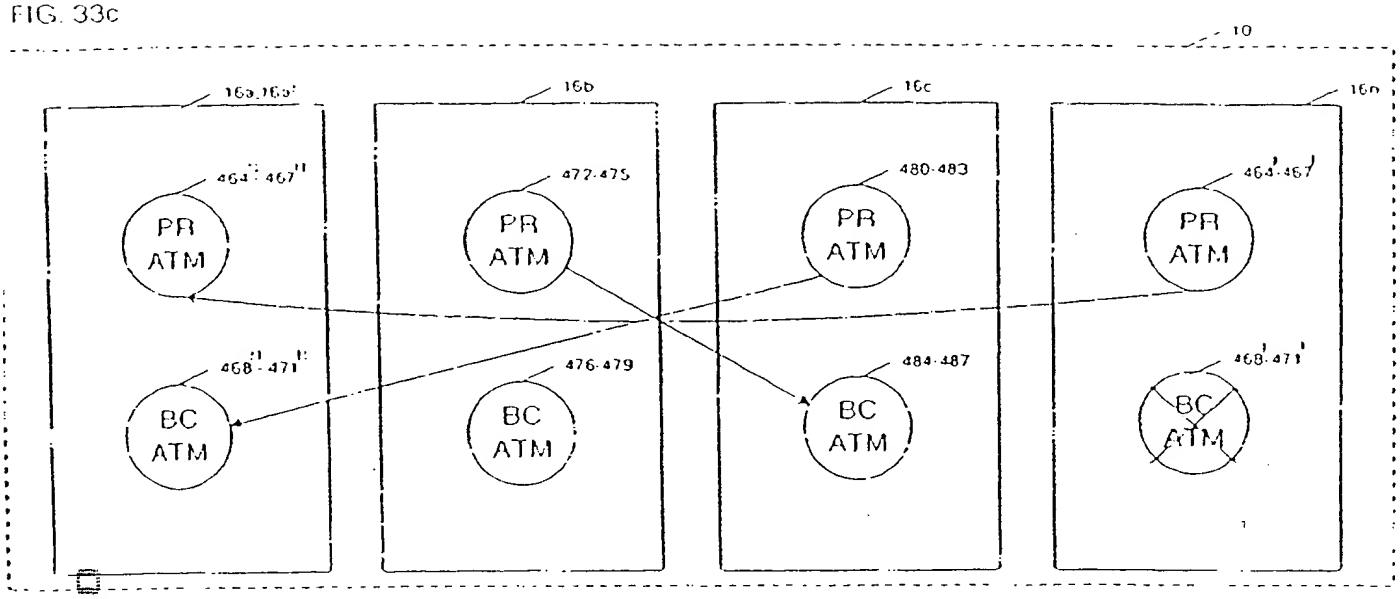
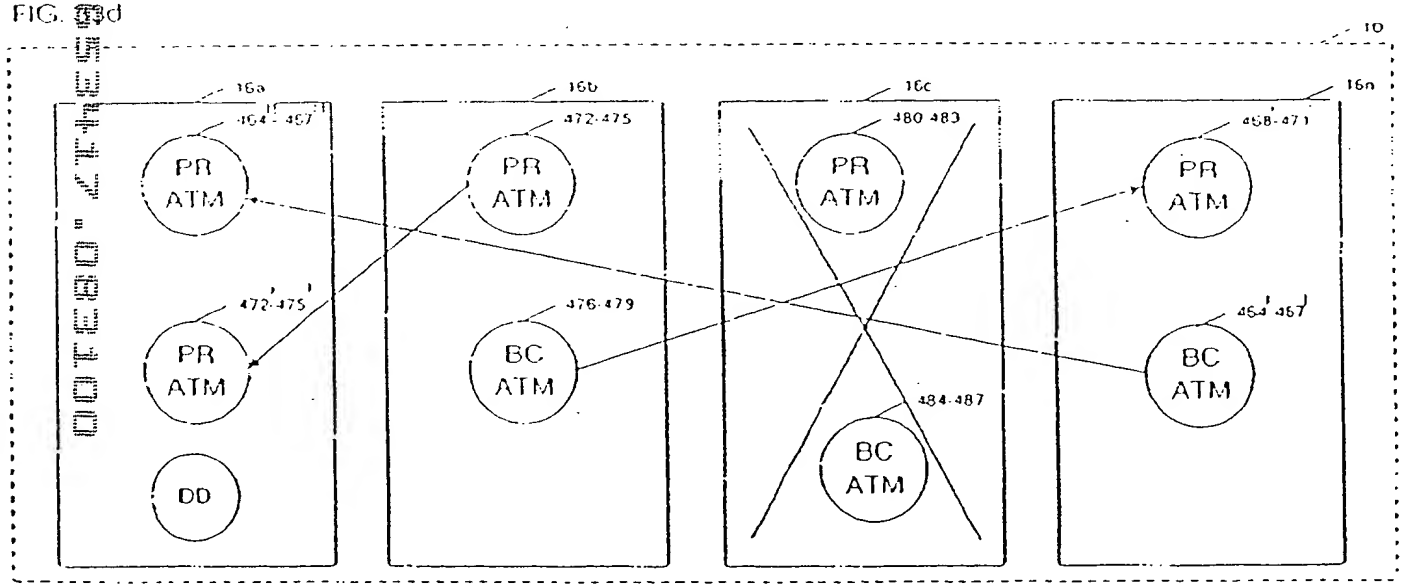
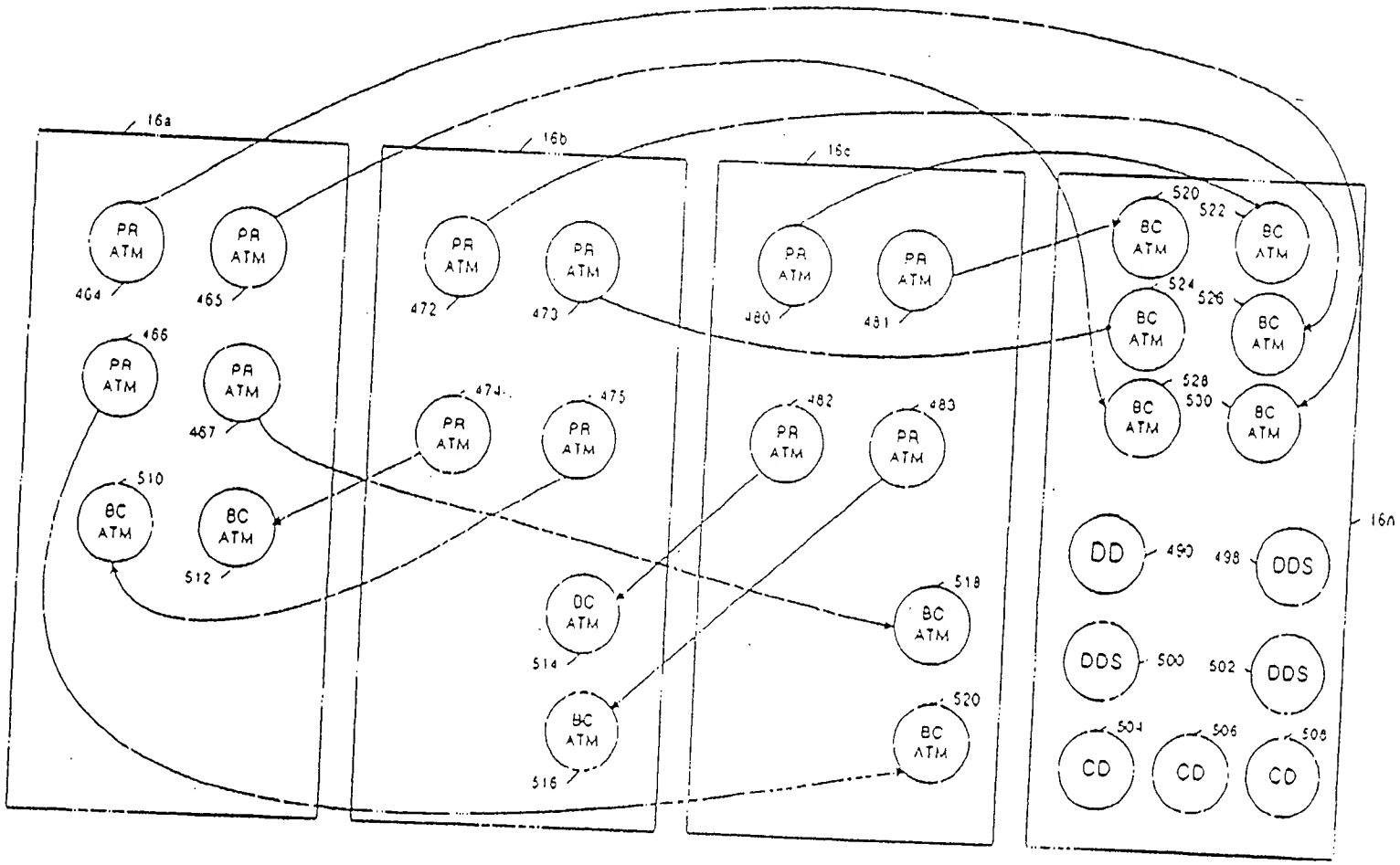


FIG. 33d



00TE80" ZThE9960

Fig. 34a



00E80" ZThE5960

FIG. 34b

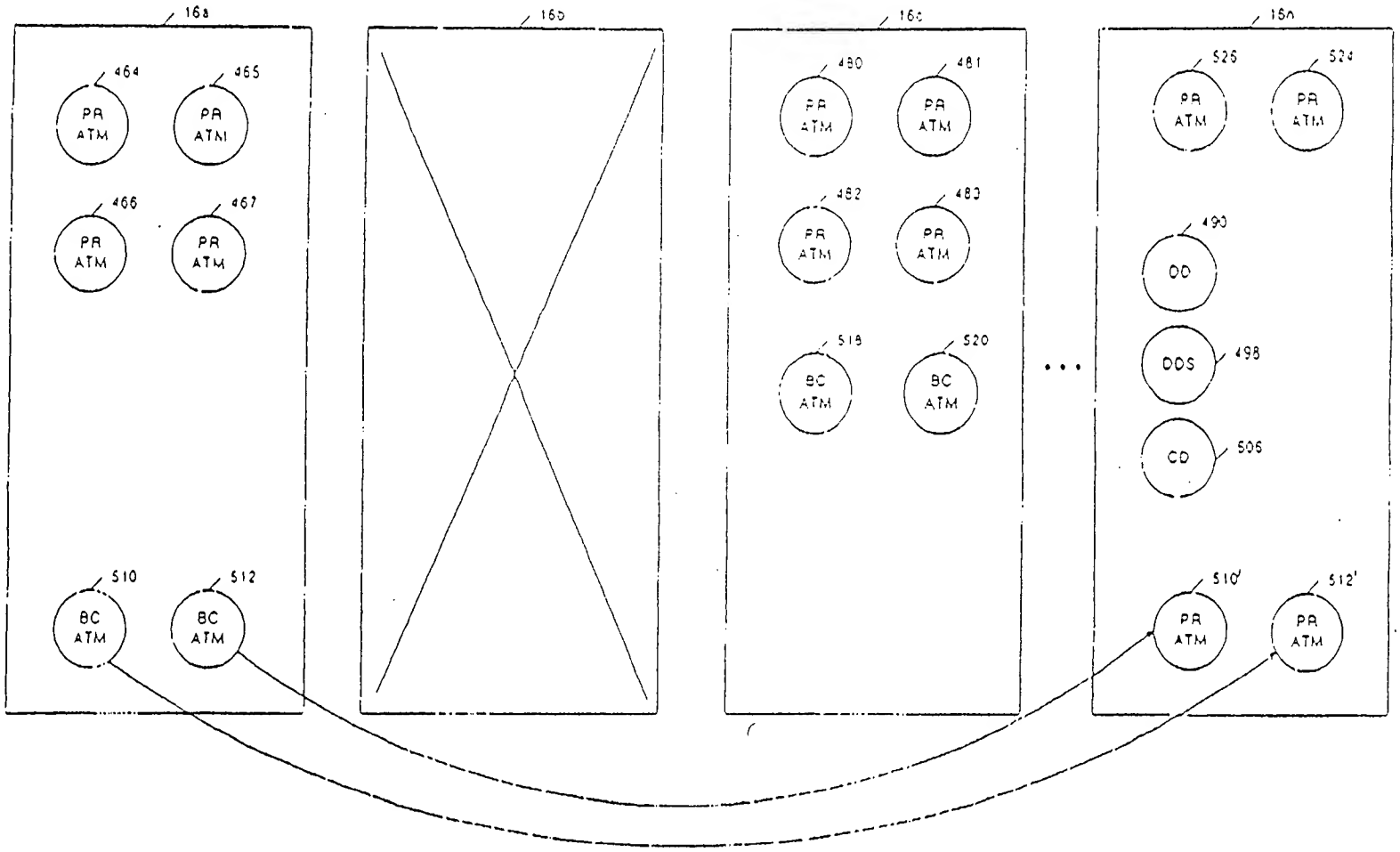


FIG. 35

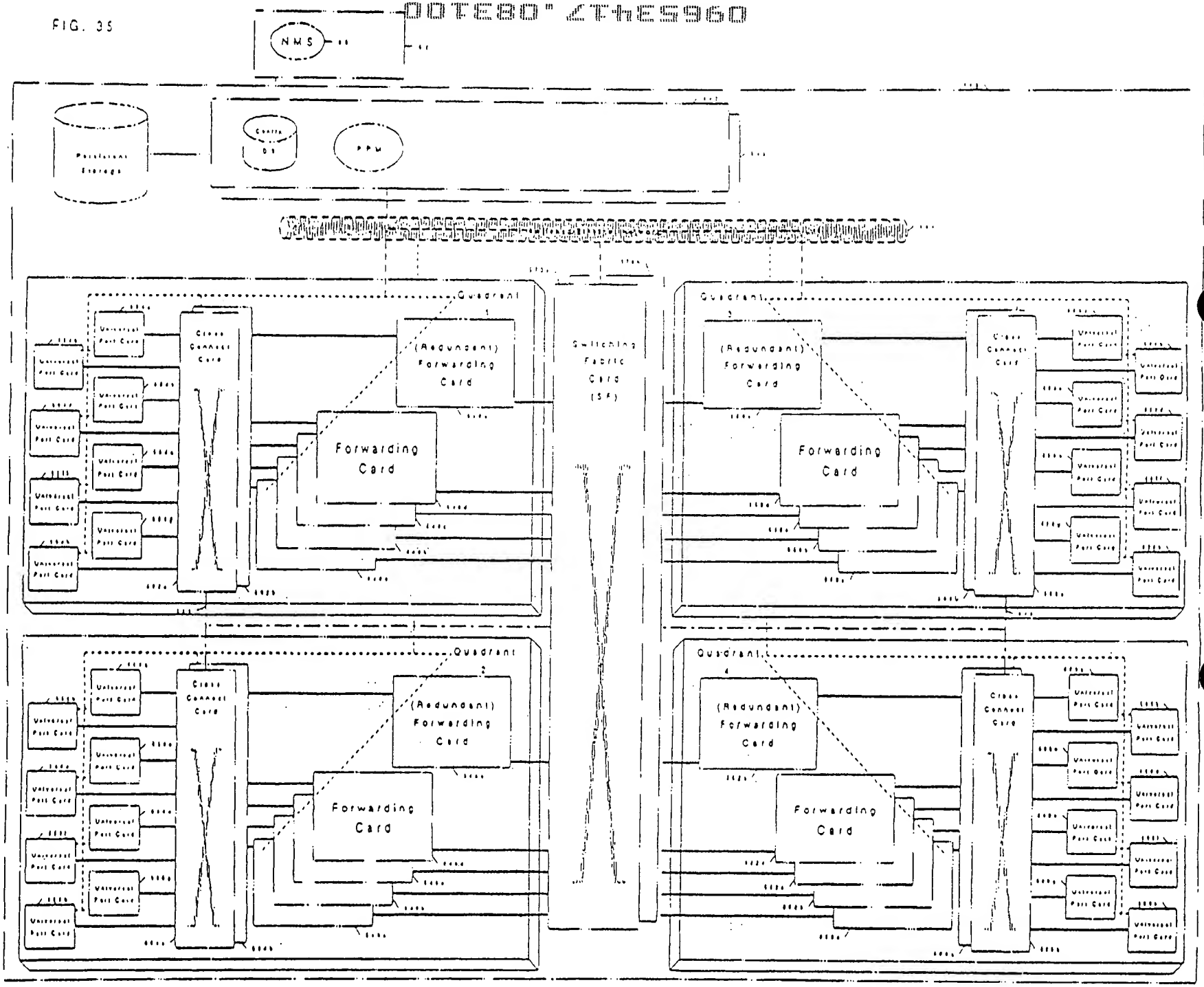

NMS
Quadrant 1
(Redundant) Forwarding Card
Forwarding Card
Cross Connect Card
Switching Fabric Card (SF)
Quadrant 2
(Redundant) Forwarding Card
Forwarding Card
Cross Connect Card
Quadrant 3
(Redundant) Forwarding Card
Forwarding Card
Cross Connect Card
Quadrant 4
(Redundant) Forwarding Card
Forwarding Card
Cross Connect Card

FIG. 36

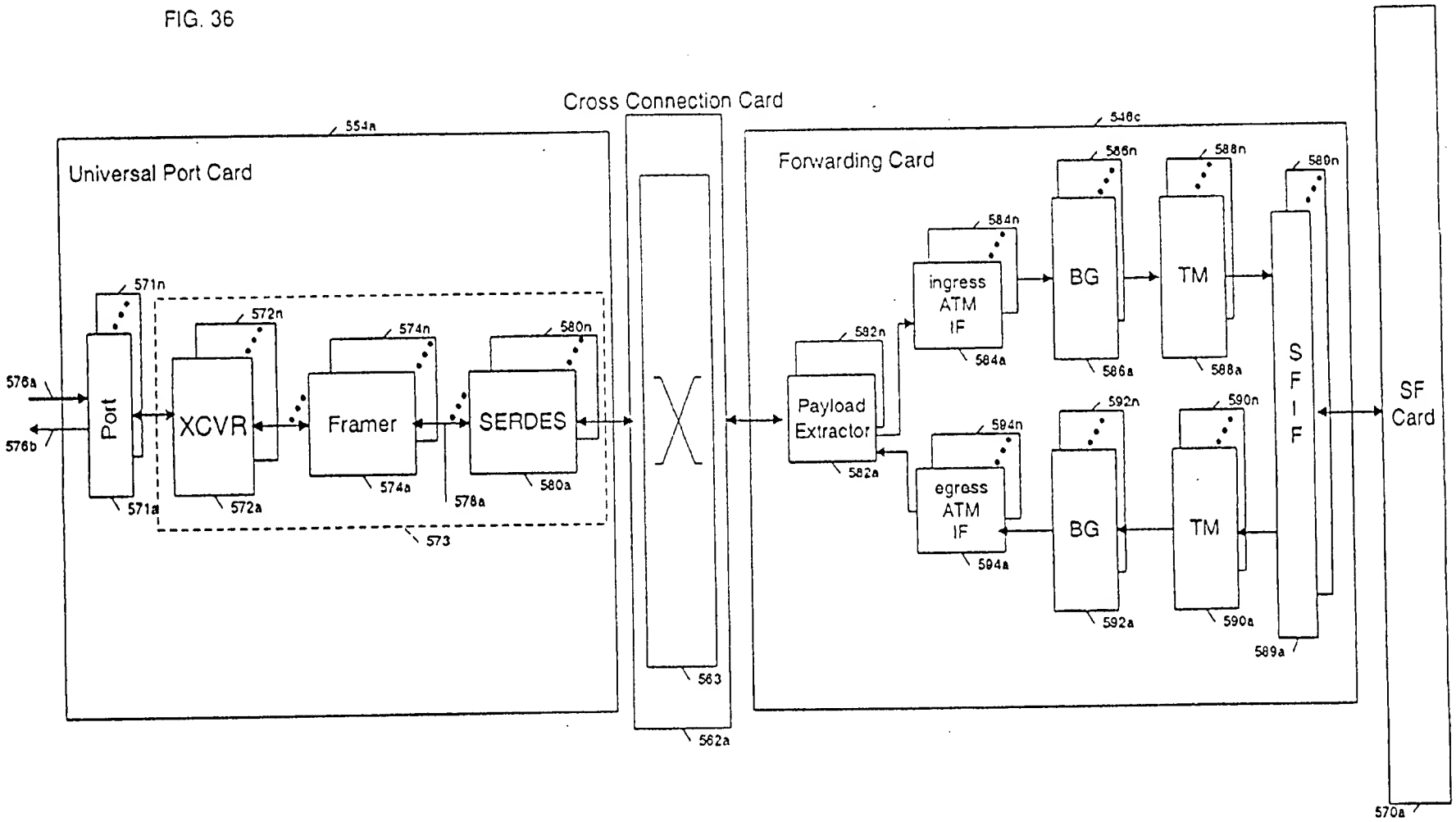

Cross Connection Card
554a
Universal Port Card
571n
572n
574n
580n
576a
576b
Port
XCVR
Framer
SERDES
571a
572a
574a
578a
580a
573
563
562a
546c
Forwarding Card
582n
584n
586n
588n
590n
592n
594n
ingress ATM IF
BG
TM
S F I F
Payload Extractor
egress ATM IF
584a
586a
588a
582a
594a
592a
590a
589a
SF Card
570a

FIG. 37

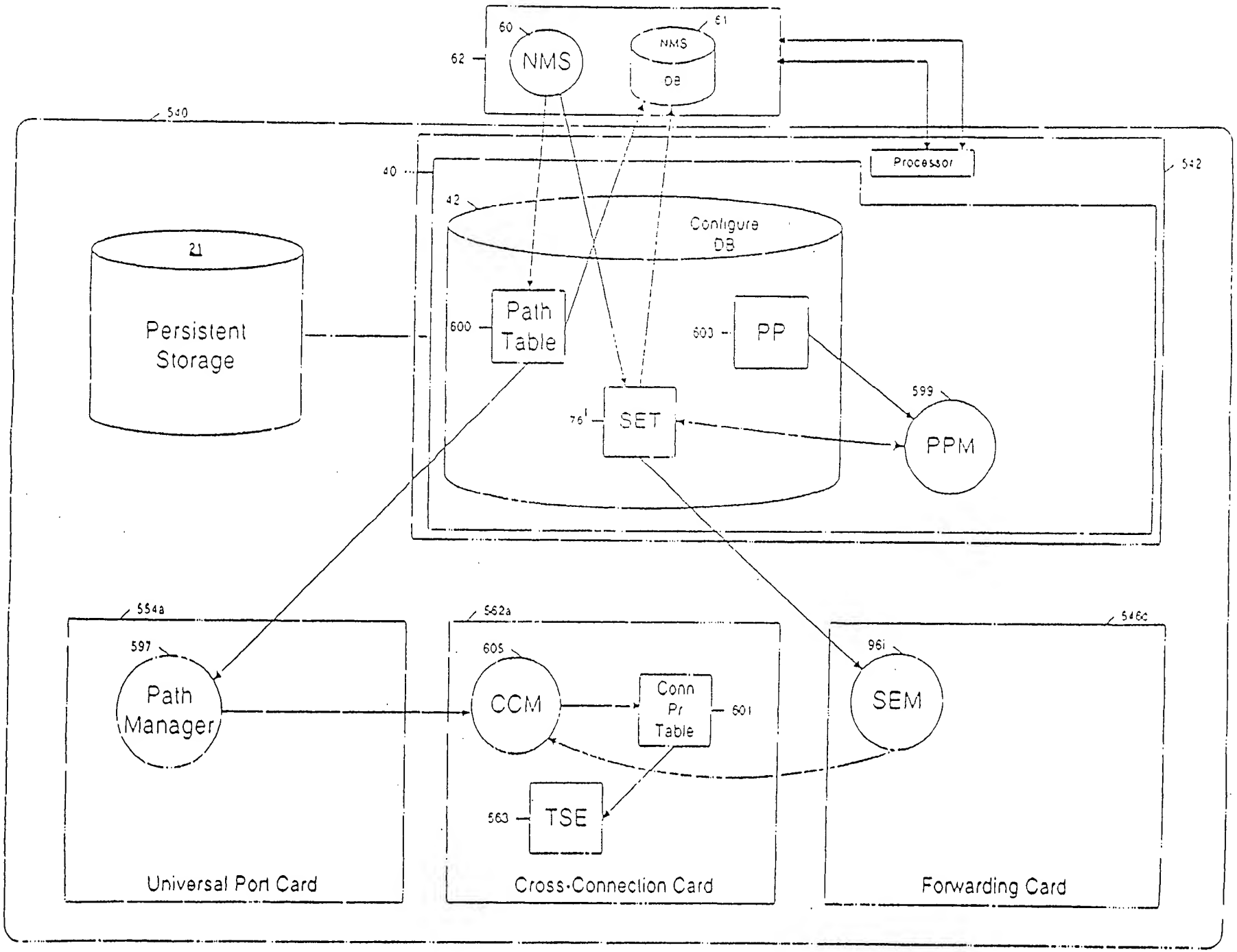

60
NMS
62
61
NMS
DB
540
542
Processor
40
42
Configure DB
21
Persistent Storage
600
Path Table
603
PP
599
76'
SET
PPM
554a
597
Path Manager
562a
605
CCM
Conn Pr Table
601
563
TSE
546c
96i
SEM
Universal Port Card
Cross-Connection Card
Forwarding Card

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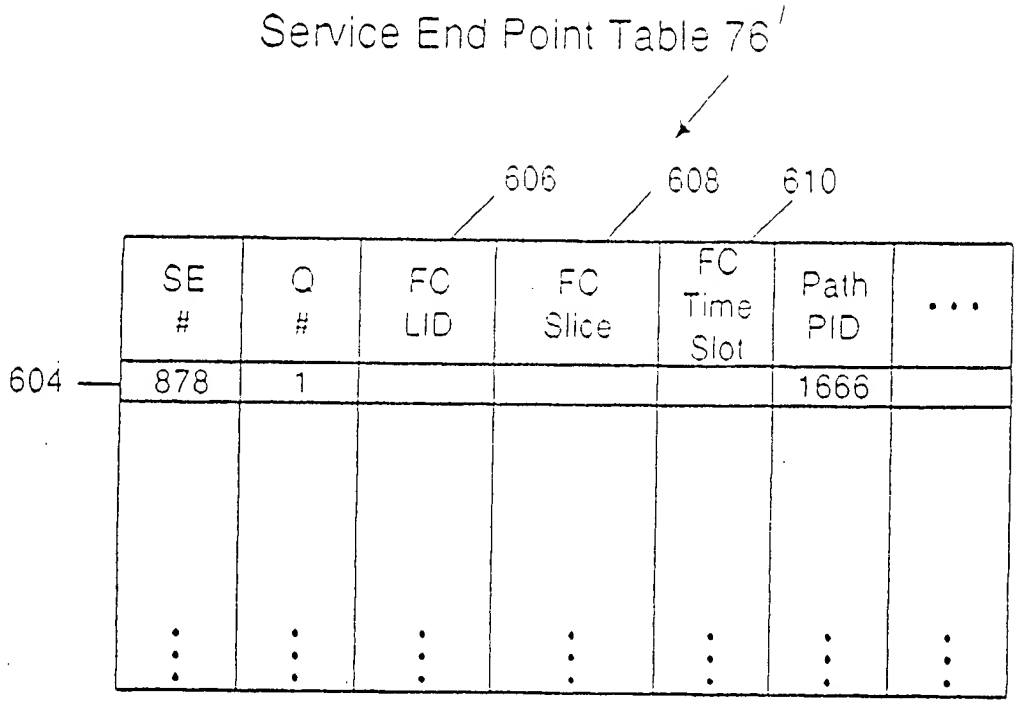
FIG. 38

Path Table 600

	Path LID	UP Port LID	Time Slot	# of Time Slots	...
602	1666	1231	4	3	
	⋮	⋮	⋮	⋮	⋮

00TE80" 2Th€S960

FIG. 39



Docket No. 1459.0004

Fig. 40

FIG. 41a
Front

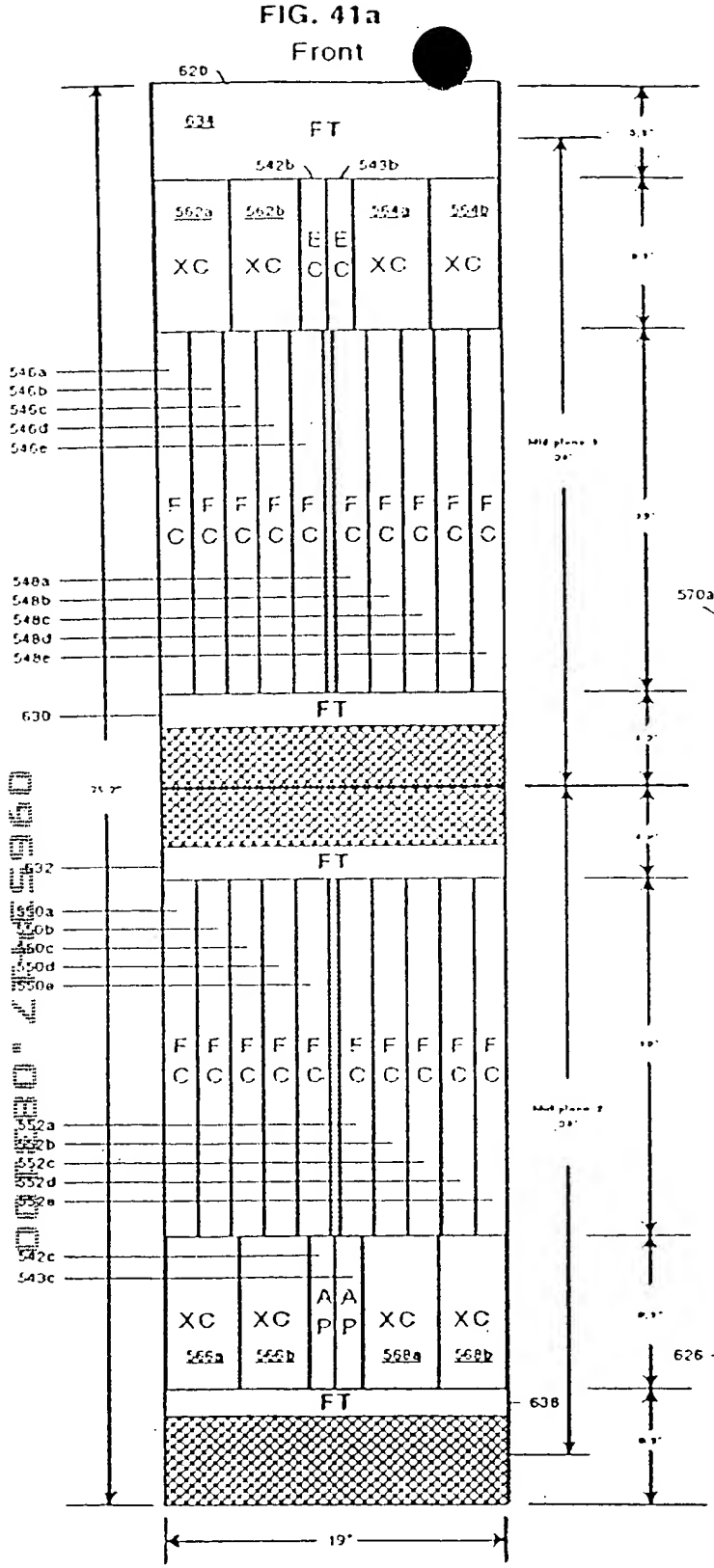


FIG. 41b
Back

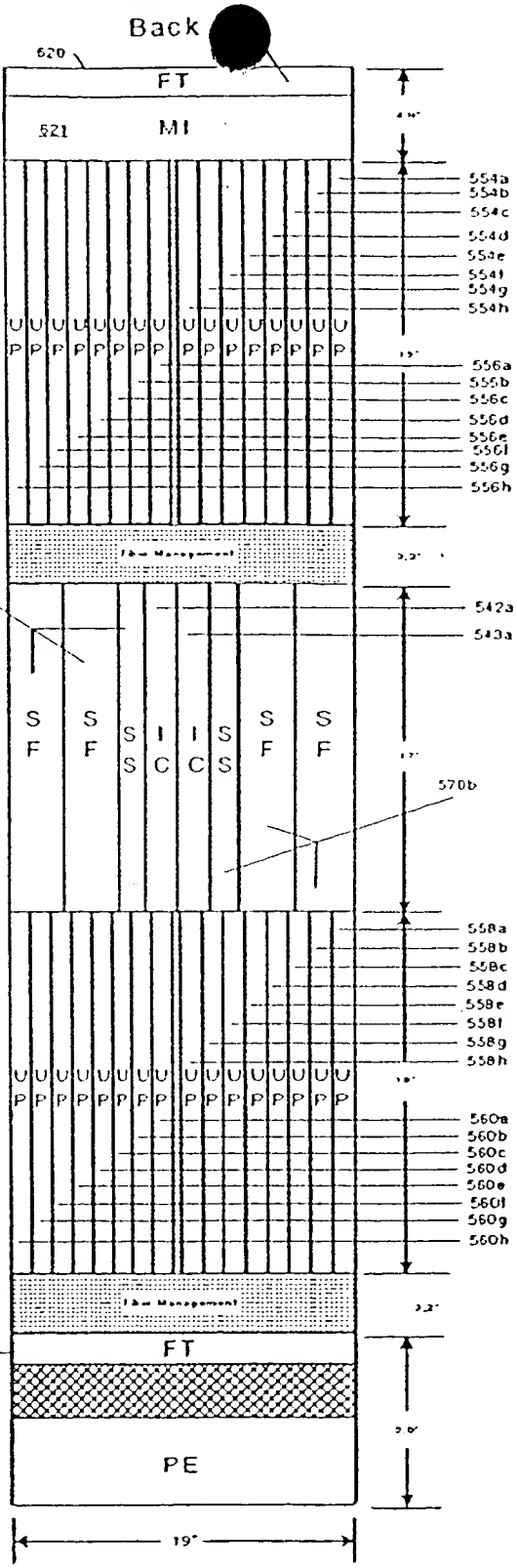
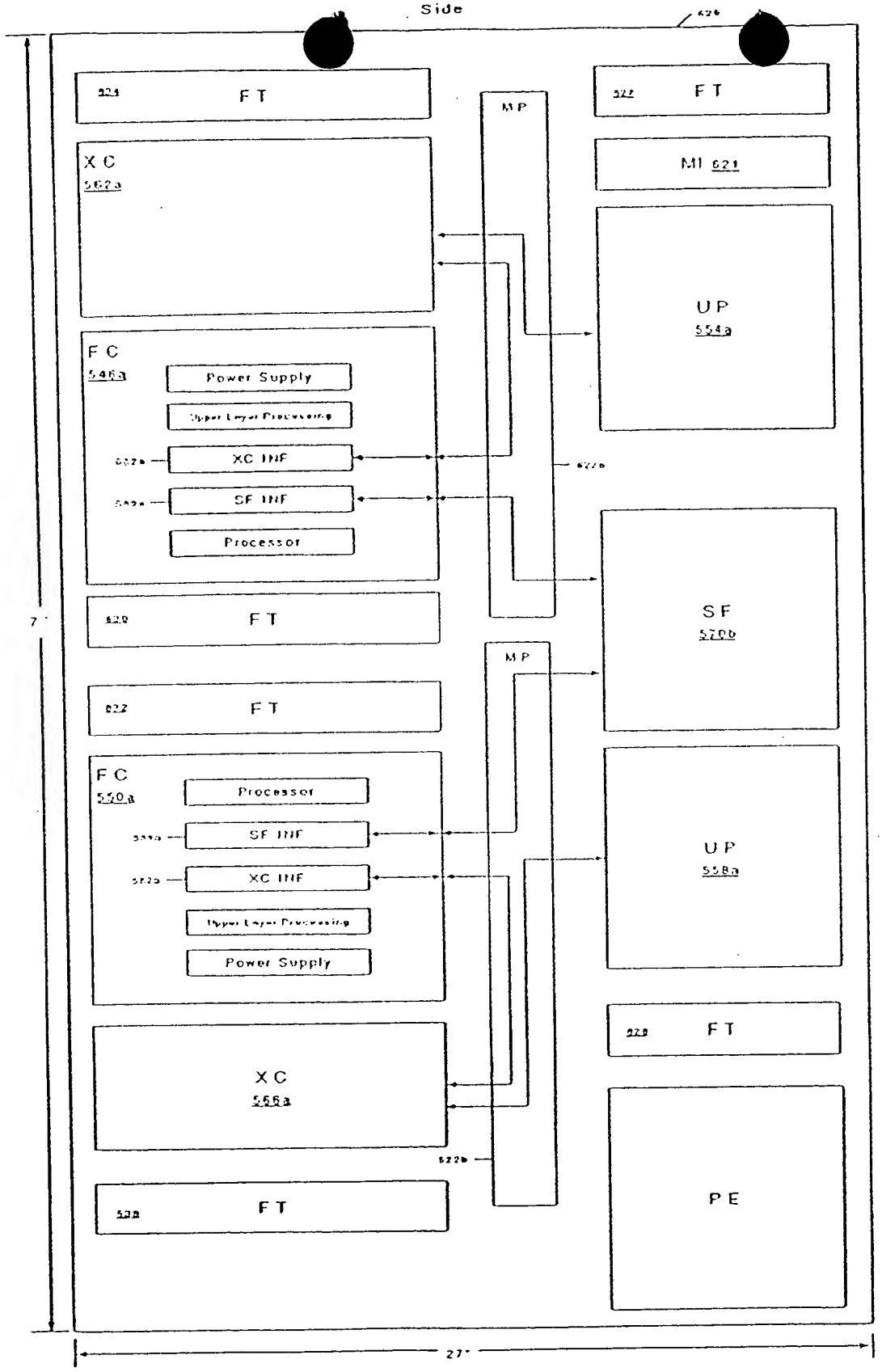


FIG. 41c



Docket # 80278.0003

FIG. 42

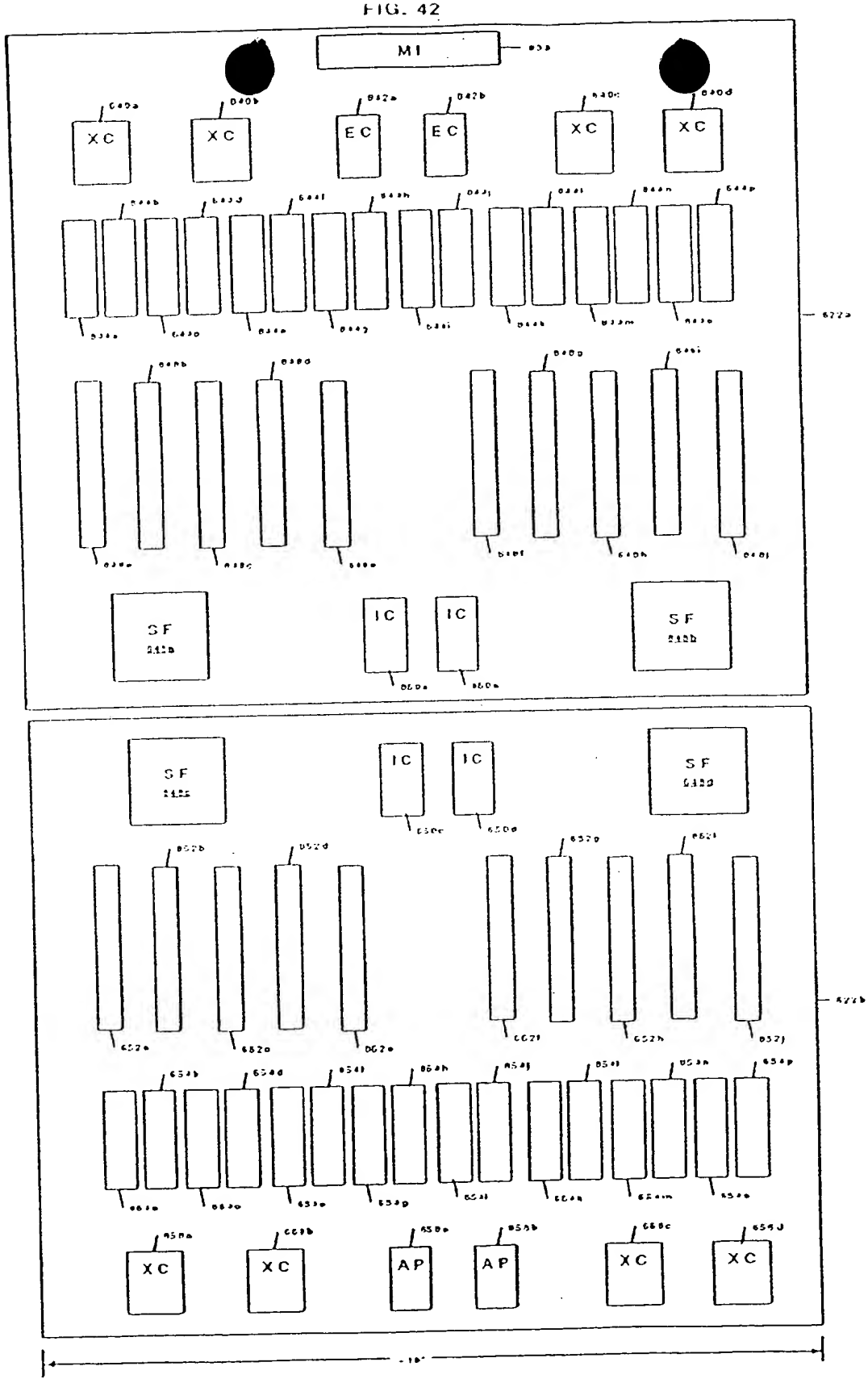
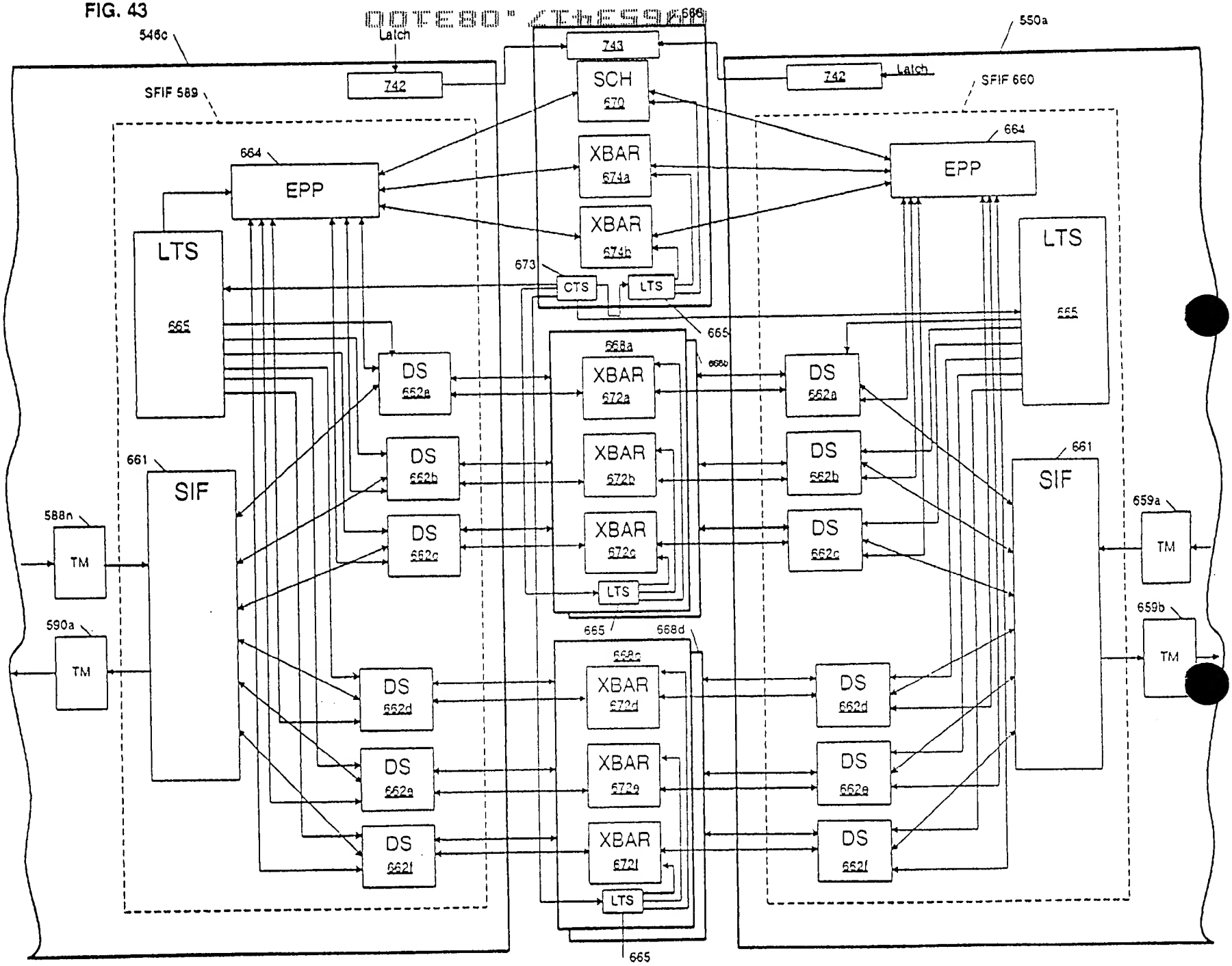


FIG. 43


546c
Latch
743
SCH
670
742
SFIF 589
664
EPP
XBAR
674a
XBAR
674b
673
CTS
LTS
LTS
665
668a
668b
DS
662a
XBAR
672a
661
SIF
588n
TM
590a
TM
DS
662b
XBAR
672b
DS
662c
XBAR
672c
LTS
665
668d
668c
DS
662d
XBAR
672d
DS
662e
XBAR
672e
DS
662f
XBAR
672f
LTS
665
550a
742
Latch
SFIF 660
664
EPP
LTS
665
661
SIF
659a
TM
659b
TM

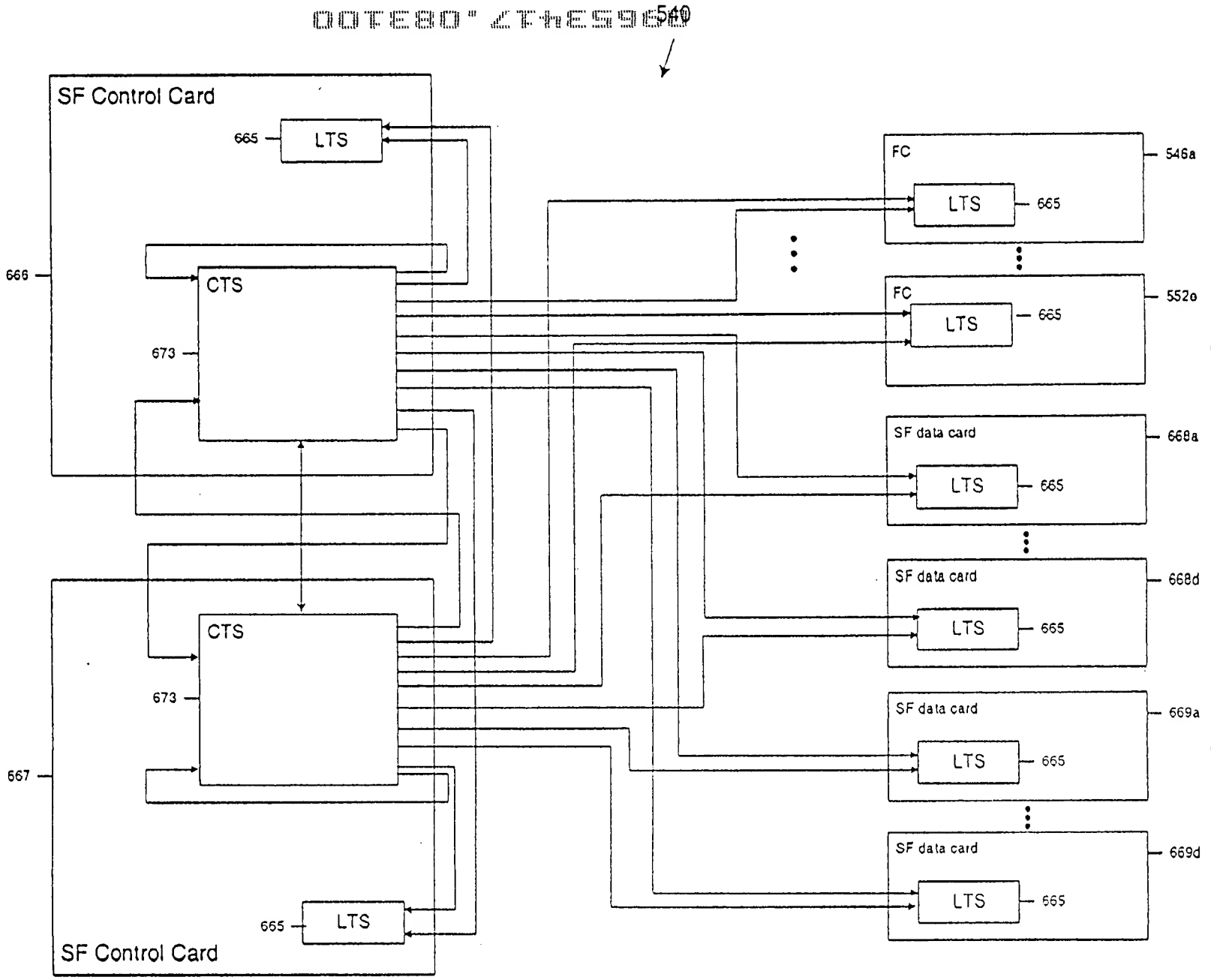
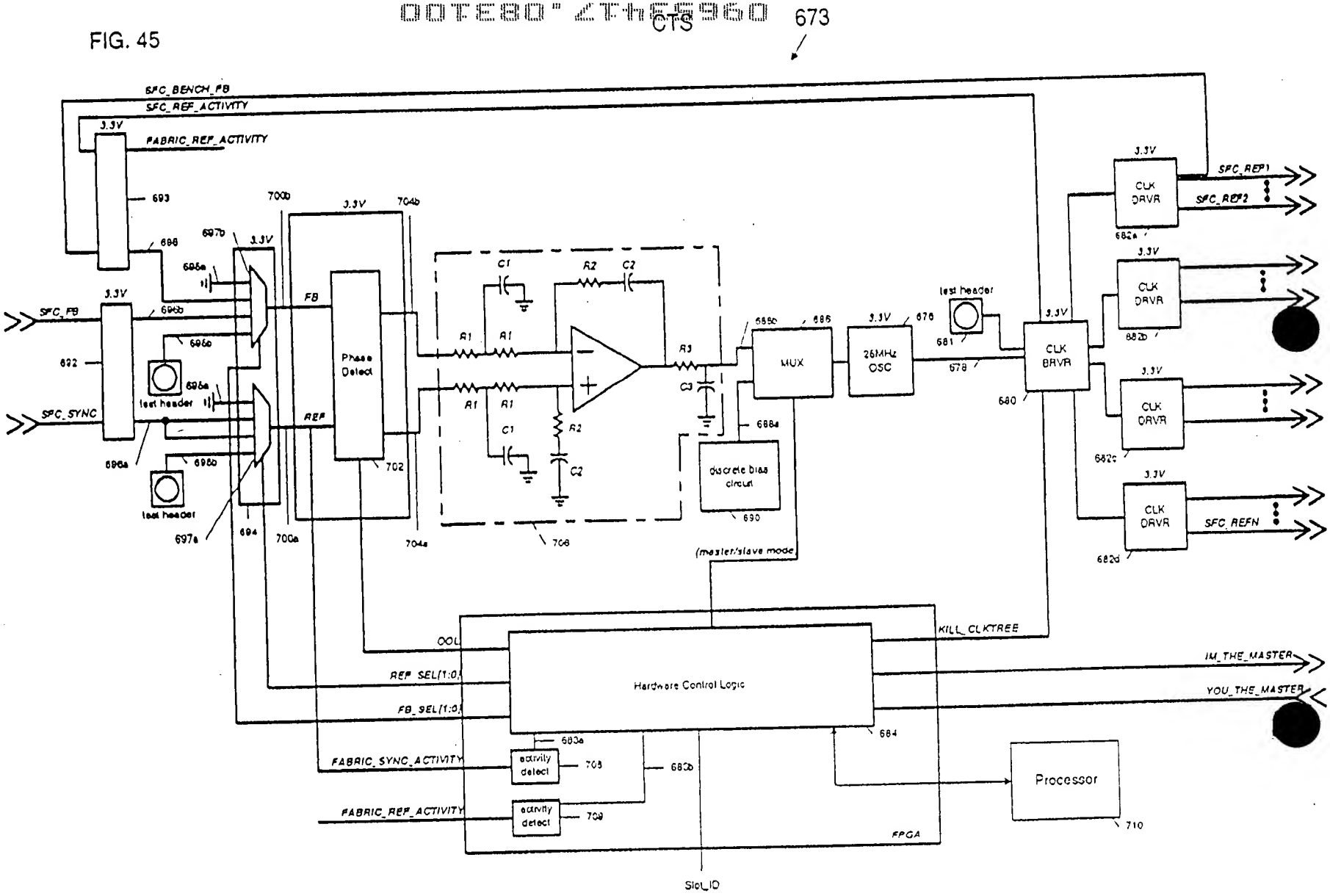

540
SF Control Card
665
LTS
666
CTS
673
667
CTS
673
665
LTS
SF Control Card
FC
LTS
665
546a
FC
LTS
665
552e
SF data card
LTS
665
668a
SF data card
LTS
665
668d
SF data card
LTS
665
669a
SF data card
LTS
665
669d

FIG. 44

FIG. 45



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Doc#: 7,058,705 B2 Jun. 6, 2006

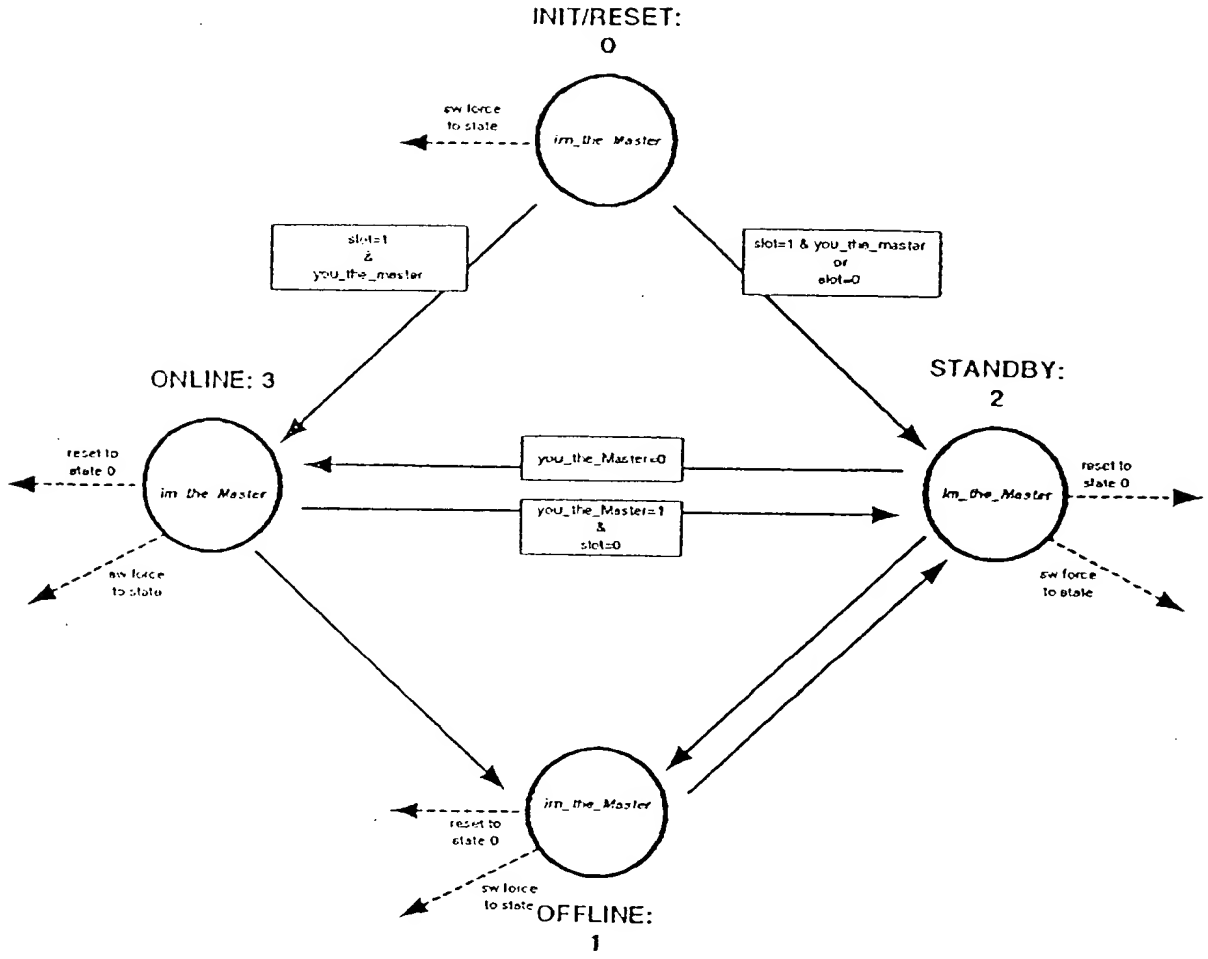


FIG. 46

LTS 666

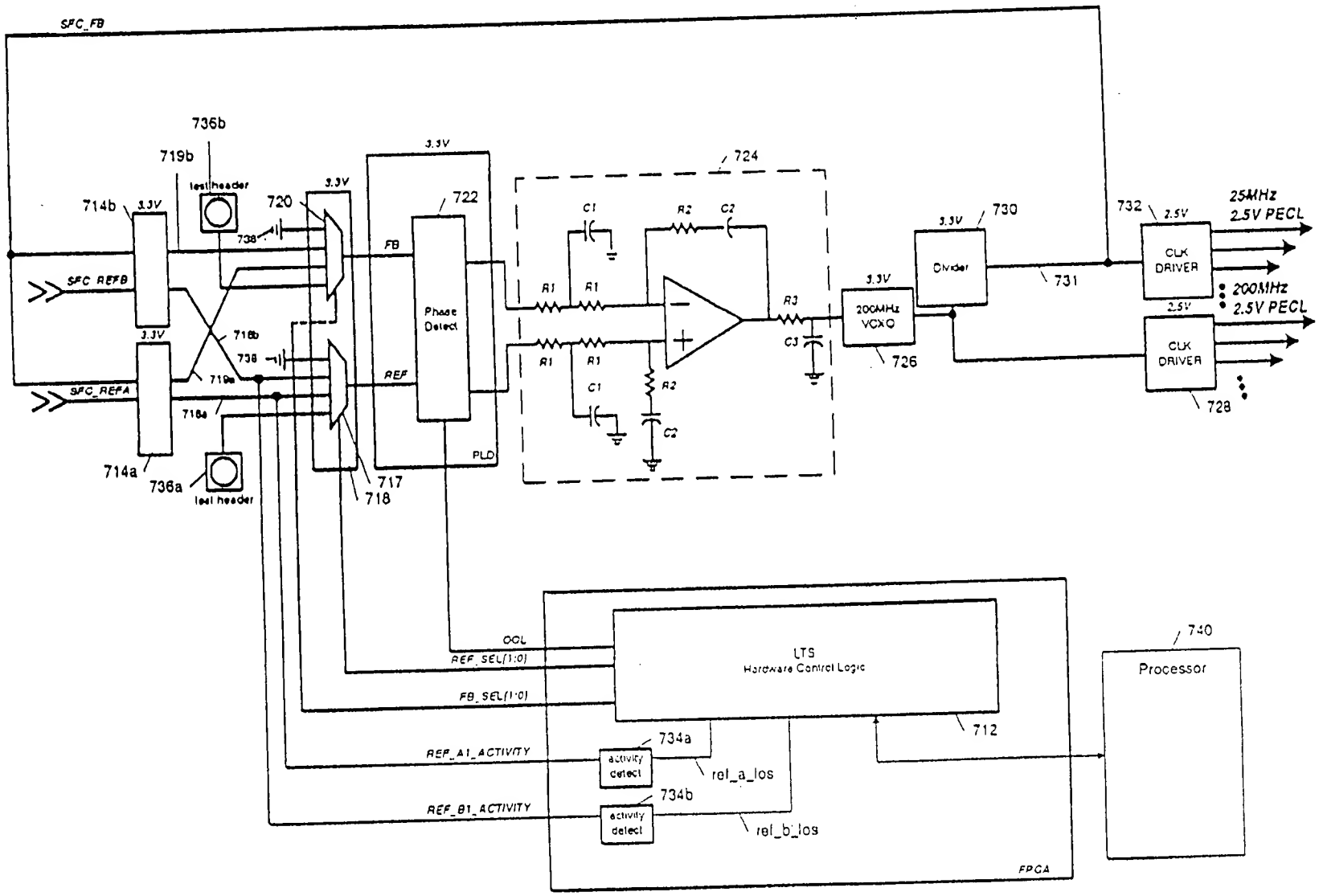


FIG. 47

Doc Code: IDS Doc Description: Information Disclosure Statement (IDS) Filed

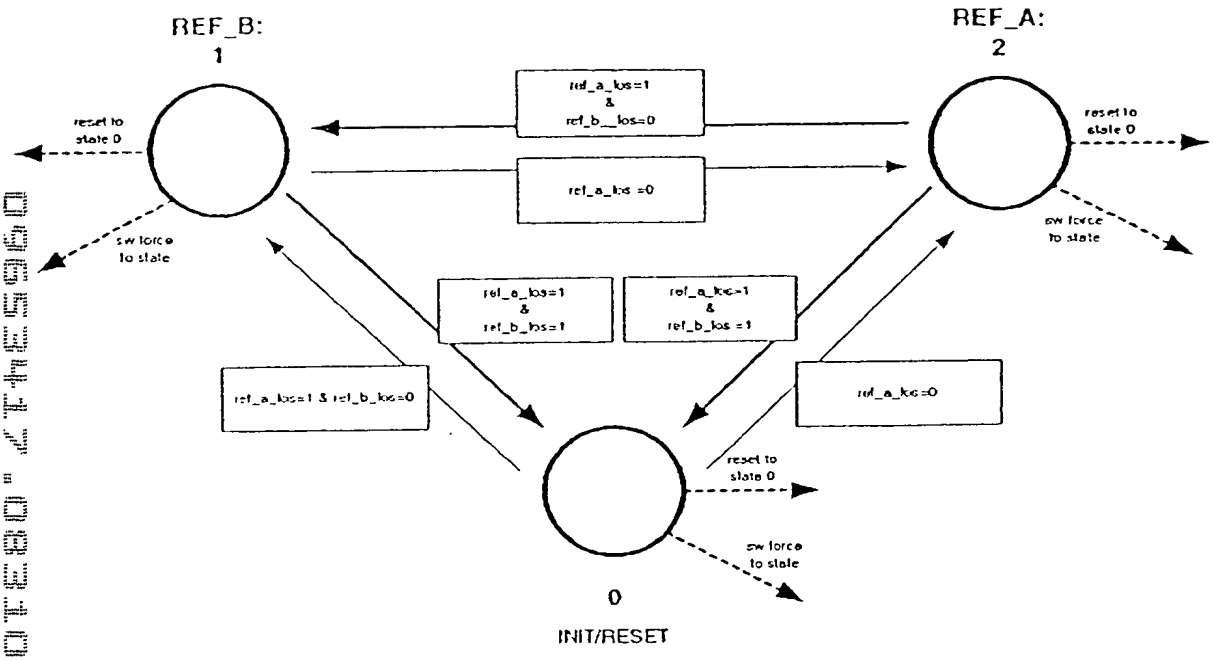


FIG. 48

Sent By: Equipe Communications; 781 795 2031; Jul-6-00 4:27PM; Page 9

FIG. 49

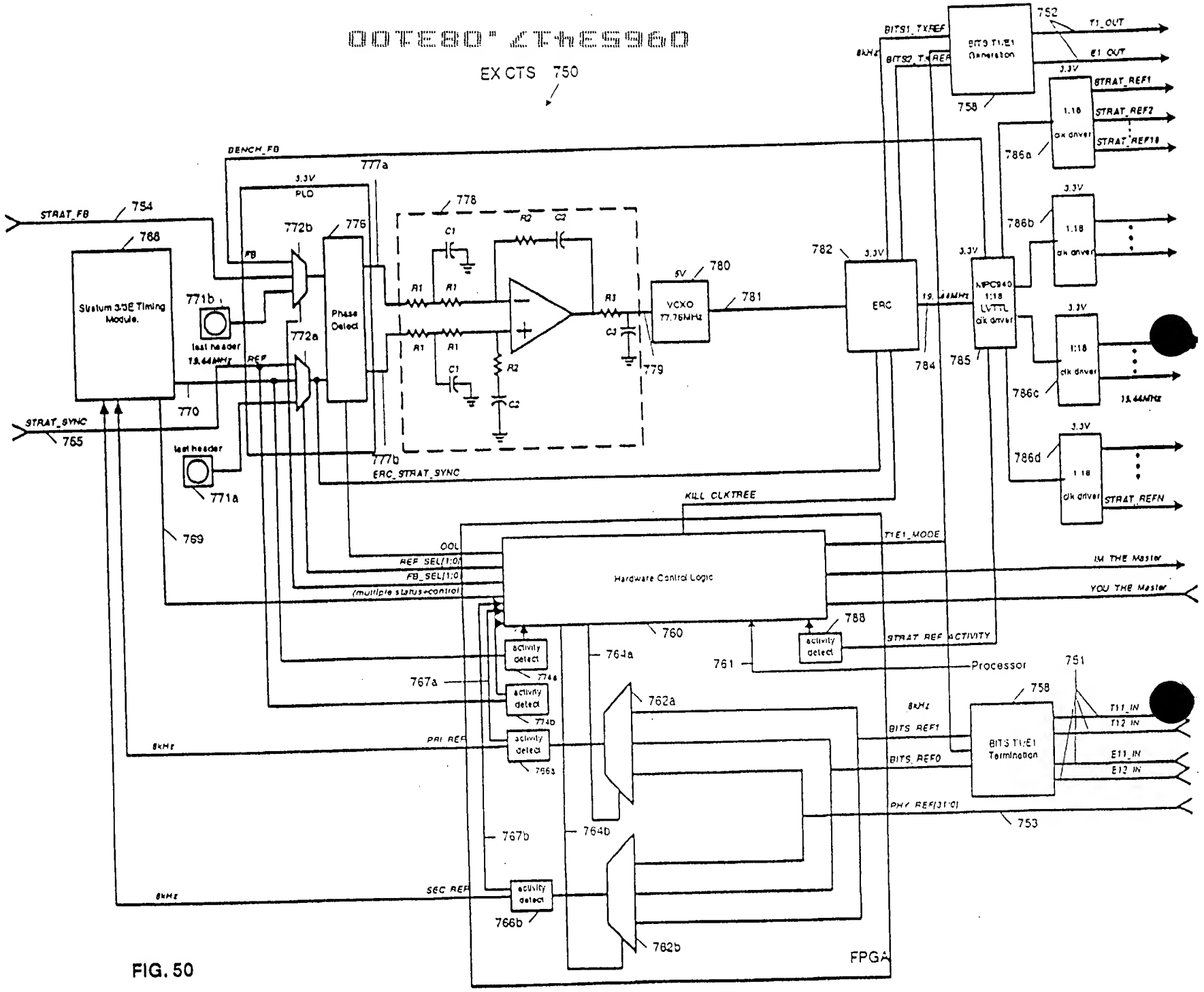

EX CTS 750
BENCH_FB
777a
3.3V
PLD
STRAT_FB
754
768
System 3.3E Timing Module.
772b
776
FB
771b
test header
19.44MHz
REF
772a
Phase Detect
778
C1
R2
C2
R1
R3
C3
779
5V
780
VCXO
77.76MHz
781
782
3.3V
ERC
19.44MHz
784
NPC940
1:18
LVTTL clk driver
785
786a
786b
786c
786d
1:18 clk driver
STRAT_REF1
STRAT_REF2
STRAT_REF18
STRAT_REFN
15.44MHz
752
BITS1_TXREF
BITS2_TXREF
8kHz
BITS T1/E1 Generator
758
T1_OUT
E1_OUT
770
STRAT_SYNC
765
test header
771a
777b
ERC_STRAT_SYNC
769
KILL CLKTREE
T1/E1_MODE
I'M THE Master
YOU THE Master
OOL
REF_SEL[1:0]
FB_SEL[1:0]
(multiple status+control)
Hardware Control Logic
760
761
788
activity detect
STRAT REF ACTIVITY
764a
767a
774a
774b
774c
774d
PRI REF
8kHz
762a
Processor
751
758
BITS T1/E1 Termination
BITS_REF1
BITS_REF0
T11_IN
T12_IN
E11_IN
E12_IN
PHY_REF[3:0]
753
767b
764b
SEC REF
766b
762b
FPGA

FIG. 50

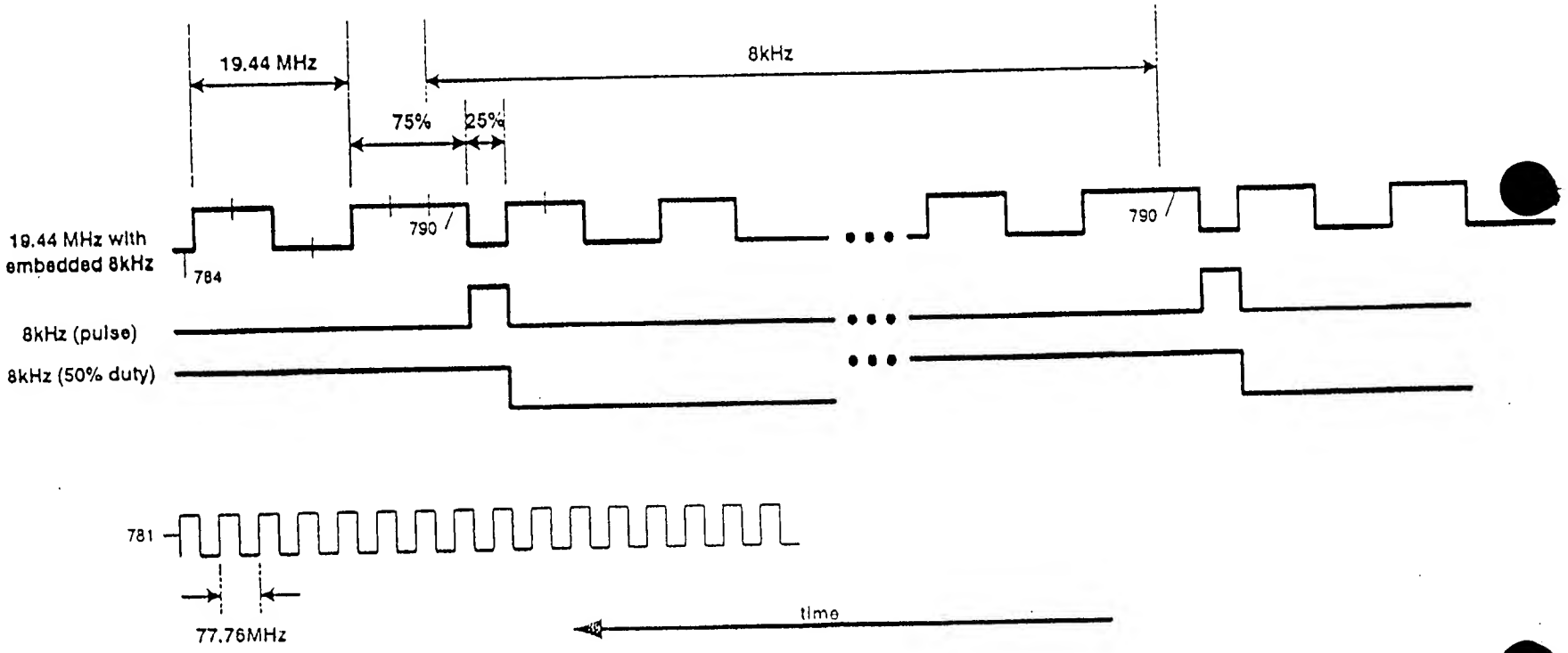

19.44 MHz
8kHz
75%
25%
19.44 MHz with
embedded 8kHz
784
790
790
8kHz (pulse)
8kHz (50% duty)
781
77.76MHz
time

FIG. 51

00TE80" 2THE5960

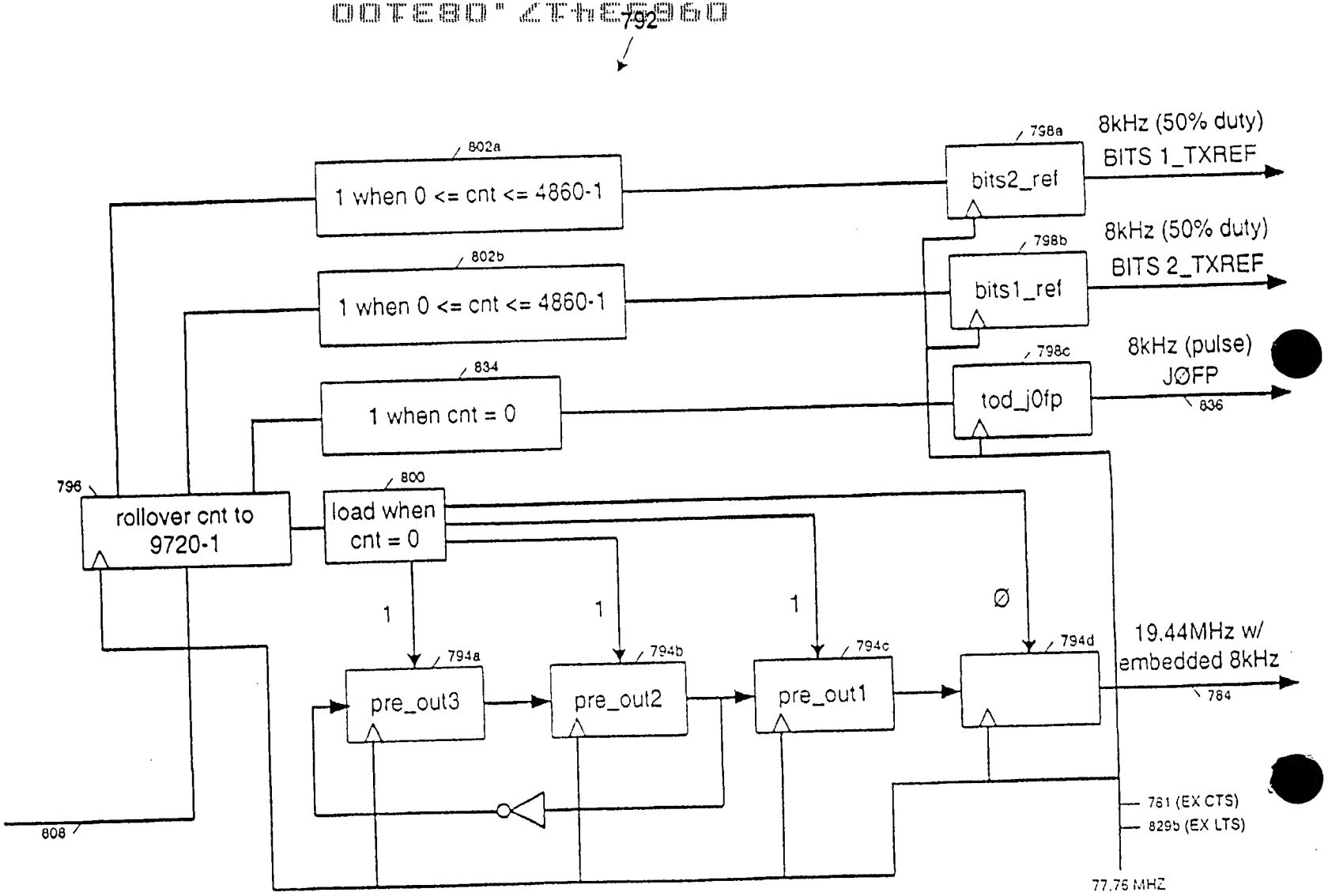
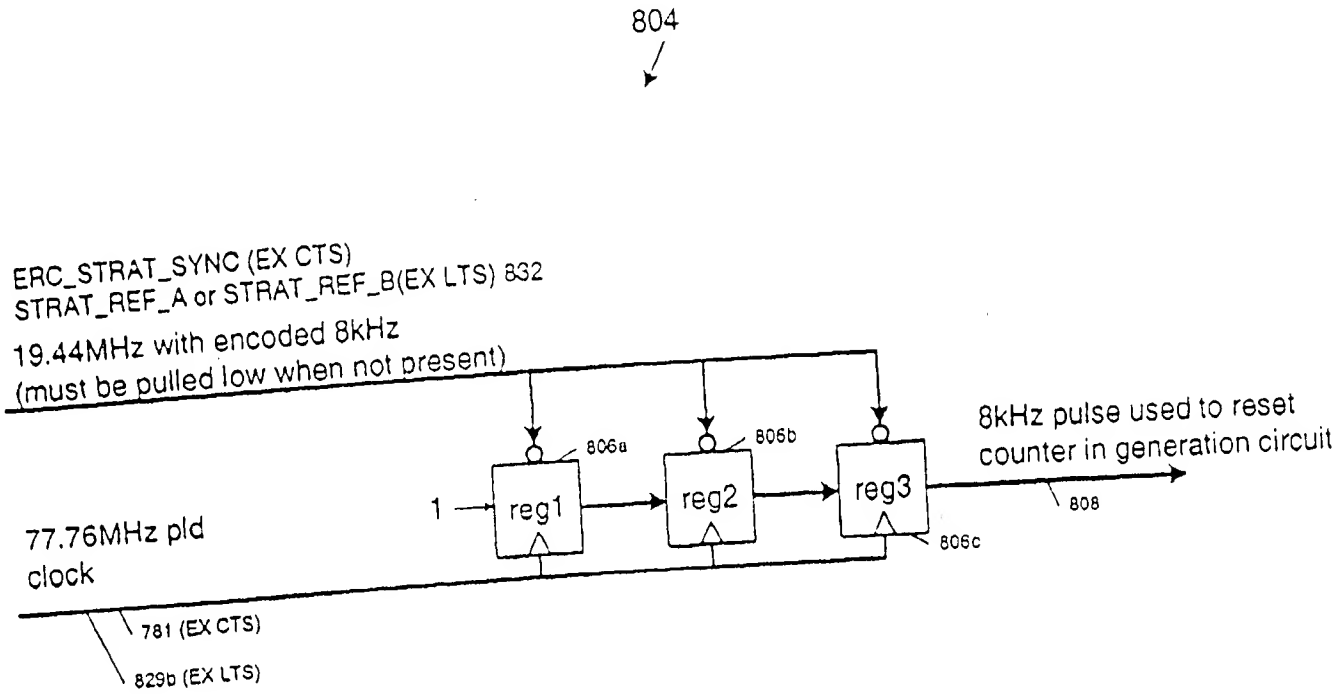


Fig. 52

00TE80" ZThES960



Extractor

FIG. 53

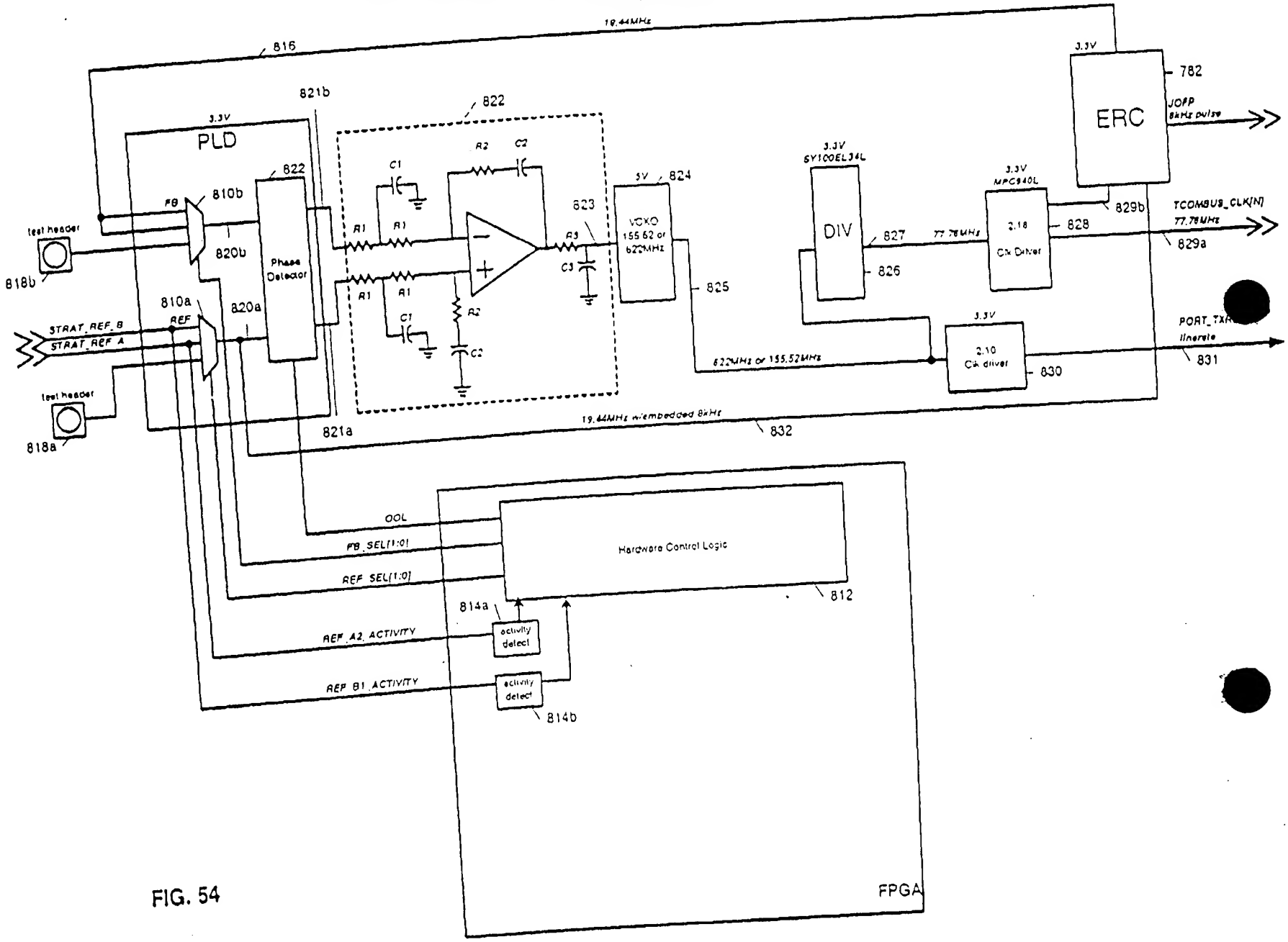

816
19.44MHz
821b
822
3.3V
PLD
FB
810b
820b
Phase Detector
test header
818b
START_REF_B
START_REF_A
810a
REF
820a
test header
818a
821a
C1
R2
C2
R1
R3
C3
5V
824
VCXO
155.62 or 622MHz
825
3.3V
SY100EL34L
DIV
827
826
77.76MHz
3.3V
MPC940L
2:18
Clk Driver
828
829b
829a
TCOMBUS_CLK[N]
77.76MHz
3.3V
ERC
782
JOFP
8kHz pulse
622MHz or 155.52MHz
3.3V
2:10
Clk driver
830
PORT_TX
Ilinerate
831
19.44MHz w/embedded 8kHz
832
OOL
FB_SEL[1:0]
REF_SEL[1:0]
Hardware Control Logic
812
814a
REF_A2_ACTIVITY
activity detect
REF_B1_ACTIVITY
activity detect
814b
FPGA

FIG. 54

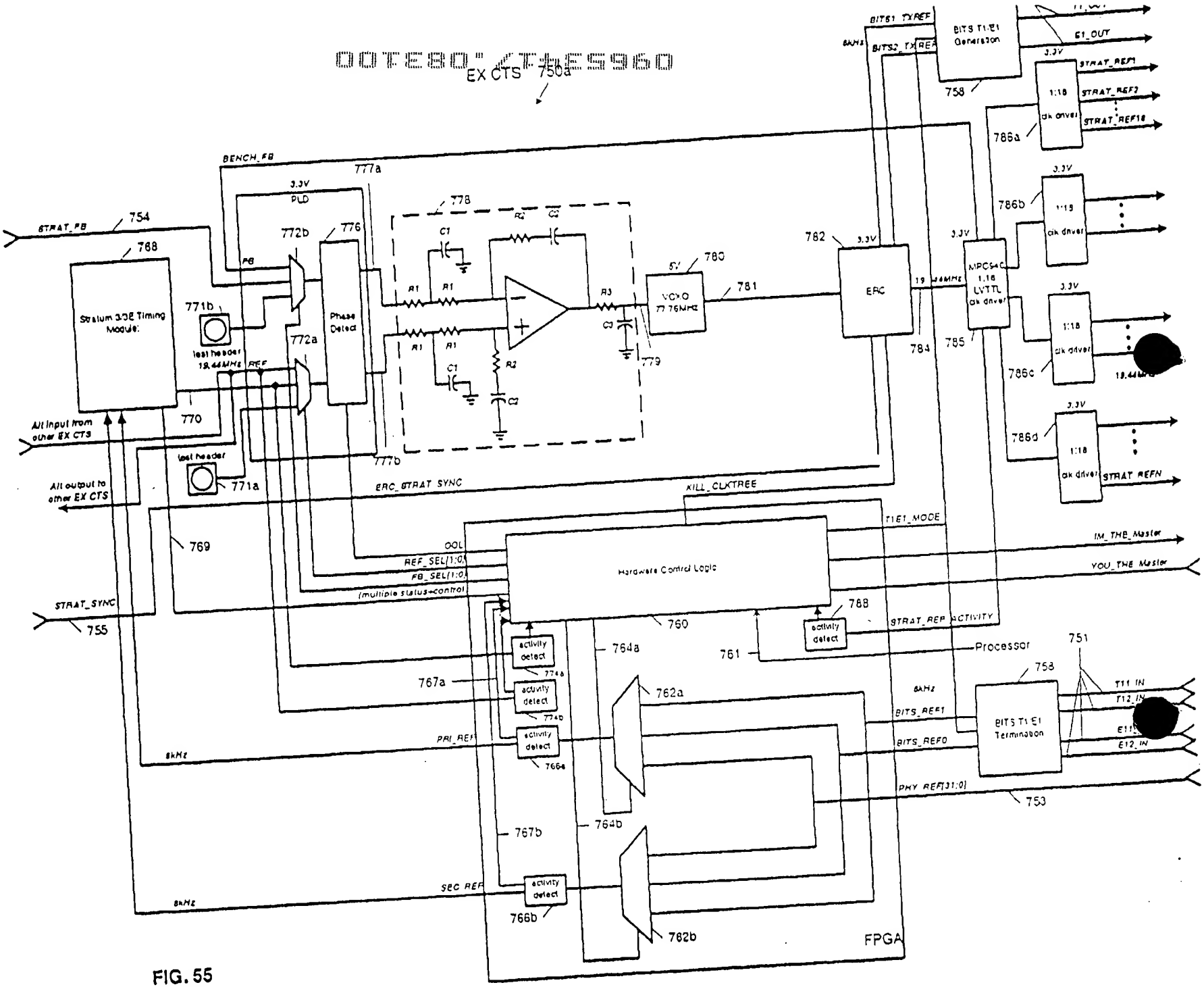

EX CTS 750a
BENCH_FB
777a
3.3V
PLD
778
754
STRAT_FB
768
772b
776
C1
R1
C2
R2
780
5V
VCXO
77.76MHz
781
782
3.3V
ERC
784
785
MPC94C
1:16
LVTTL
clk driver
786a
786b
786c
786d
1:18
STRAT_REF1
STRAT_REF2
STRAT_REF16
STRAT_REFN
758
BITS T1/E1
Generation
BITS1_TX_REF
BITS2_TX_REF
8kHz
E1_OUT
Stratum 3/3E Timing
Module
771b
test header
19.44MHz
REF
772a
Phase
Detect
R3
C3
779
777b
All input from
other EX CTS
770
771a
All output to
other EX CTS
769
ERC_STRAT_SYNC
XILL_CLKTREE
T1E1_MODE
IM_THE_Master
YOU_THE Master
REF_SEL[1:0]
FB_SEL[1:0]
(multiple status-control)
Hardware Control Logic
760
STRAT_SYNC
755
activity
detect
774a
774b
774c
774d
764a
764b
767a
767b
762a
762b
761
788
STRAT_REF ACTIVITY
Processor
751
758
BITS T1/E1
Termination
T11_IN
T12_IN
E11_IN
E12_IN
BITS_REF1
BITS_REF0
PHY_REF[31:0]
753
PRI_REF
SEC REF
8kHz
FPGA

FIG. 55

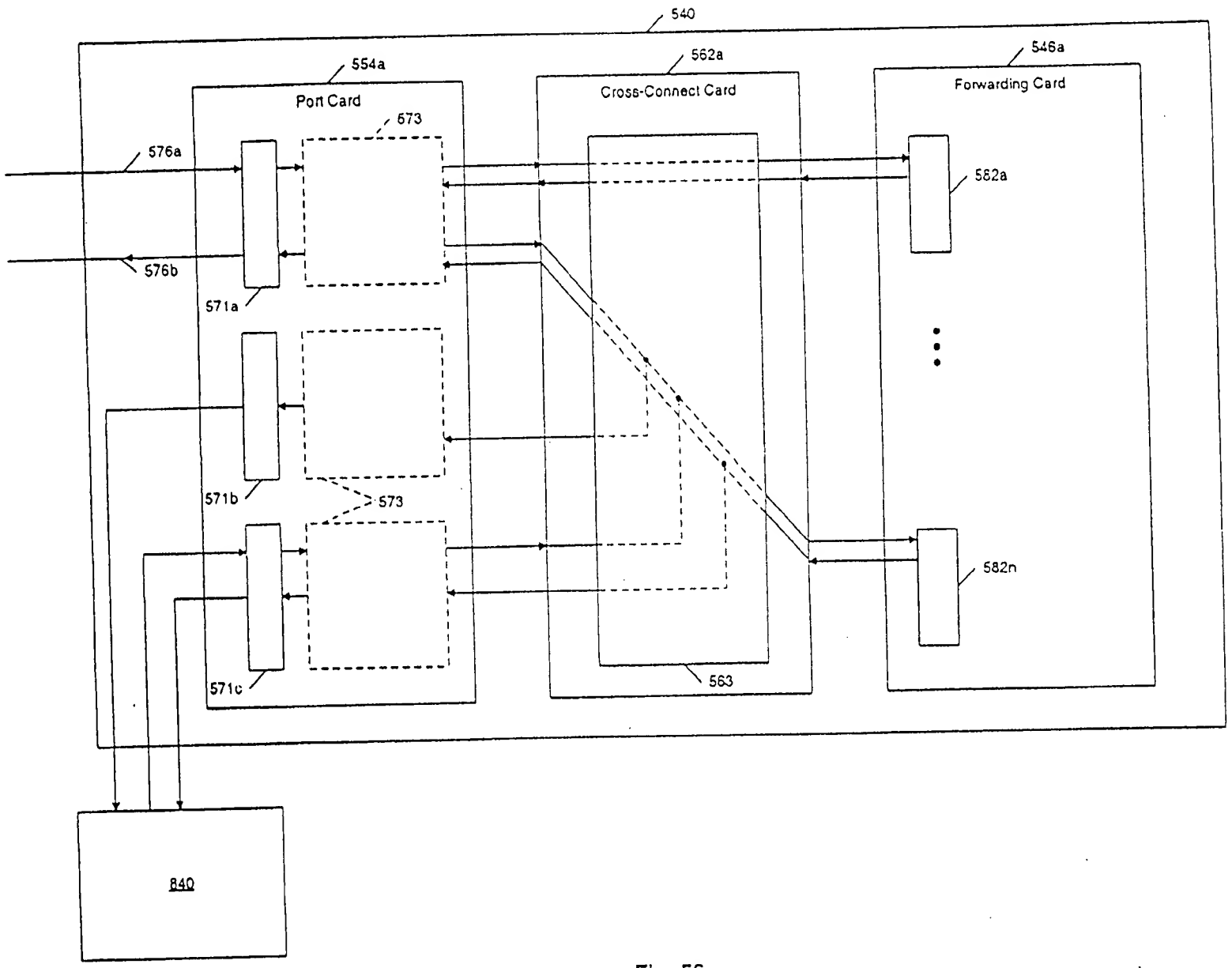
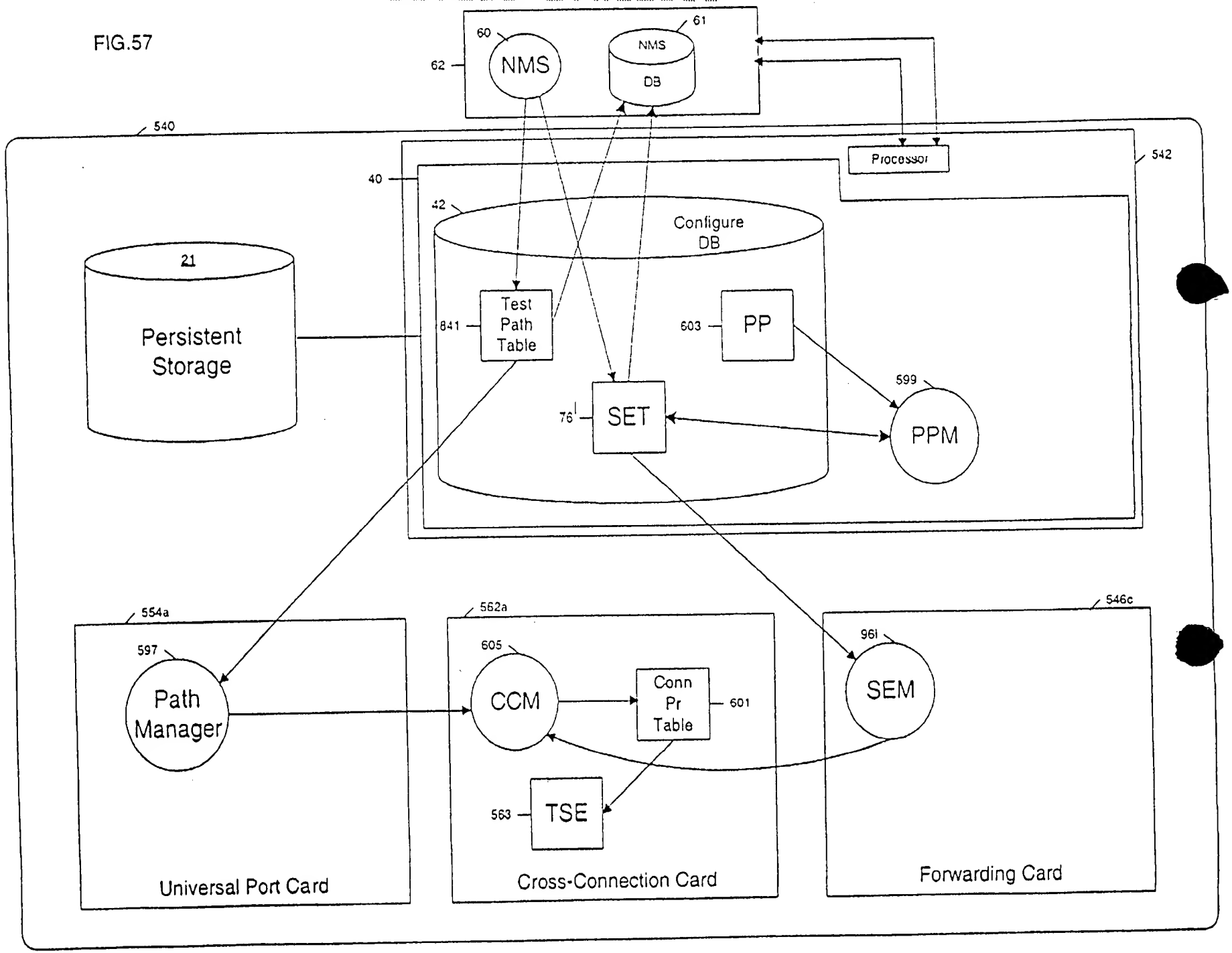

540
554a
Port Card
562a
Cross-Connect Card
546a
Forwarding Card
573
576a
576b
582a
571a
571b
573
582n
571c
563
840

Fig. 56

00E80" 2THE5960

FIG.57



00TE80"27hE5960

Sent By: Equipe Communications; 781 795 2031; Jul-12-00 3:57PM; Page 5/5

FIG. 58

Test Path Table 841

	Path LID	UP Port LID	Time Slot	# of Time Slots	Monitor (844)	Enable Port Receiver (845)	...
842	1666	1232	4	3	Ingress	No	
843	1666	1233	4	3	Egress	No	
844	1666	1233	4	3	Ingress	Yes	
	⋮	⋮	⋮	⋮			⋮